STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 169295

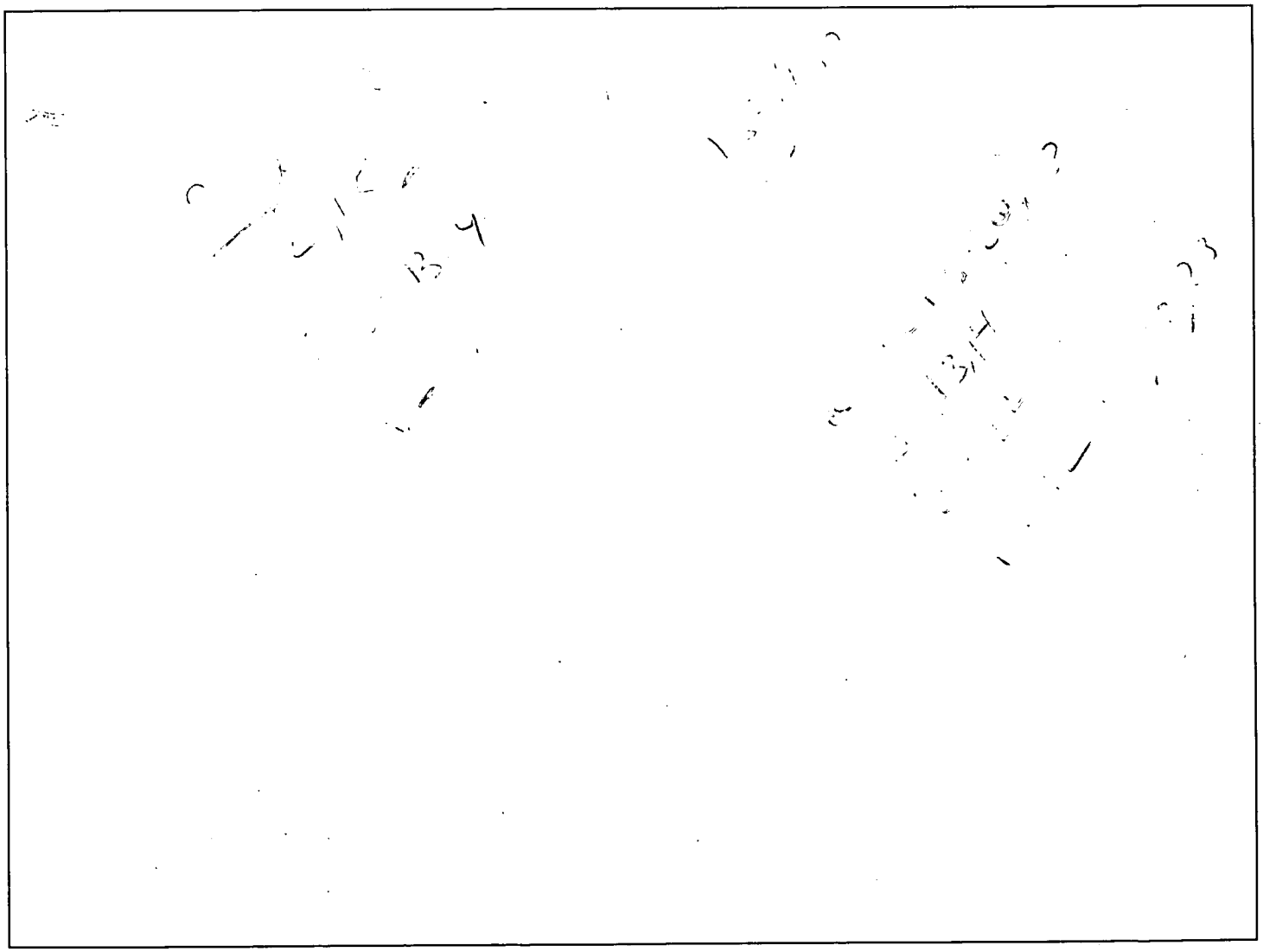
TO: Alton Pryor
Location: 4a39 / 4c70
Art Unit: 1616
Tuesday, October 25, 2005

Case Serial Number: 09/781695

From: Noble Jarrell
Location: Biotech-Chem Library
Rem 1B71
Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes



ACCESS DB # 169295

FOR OFFICIAL USE ONLY *PLEASE PRINT CLEARLY*

RECEIVED
OCT 21 2005
CM/CHEM LIBRARY
STIC

Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: Alton Pryor Examiner # : 74458 Date: 10/21/05
Art Unit: 1616 Phone Number: 2-0621 Serial Number: 09781,695
Location (Bldg/Room#): _____ (Mailbox #): _____ Results Format Preferred (circle): PAPER DISK

****

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Date: _____

Search Topic:
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Search) Claim 12

a) search: formula V
b) search: orthovanadate (OR) rose bengal (OR) tetrazolium (OR) glyceollin (OR) glucan (OR) phytophthora sojae (OR) ion effector (OR) Copper salts
c) search: (appl? or treat? or administ?) (3a) (plant?, or crop? or tree?)
d) combine: a and b and c / a (p) b (p) c

Search) claim 23

a) search: formula V
b) search: b as indicated above
c) combine: a and b / a (p) b

****

STAFF USE ONLY

Searcher: Noble
Searcher Phone #: _____
Searcher Location: _____
Date Searcher Picked Up: 10/25/05
Date Completed: 10/25/05
Searcher Prep & Review Time: 10
Online Time: 77

Type of Search

_____ NA Sequence (#)
_____ AA Sequence (#)
3 Structure (#)
1 Bibliographic
_____ Litigation
_____ Fulltext
_____ Other

Vendors and cost where applicable

✓ STN _____ Dialog
_____ Questel/Orbit _____ Lexis/Nexis
_____ Westlaw _____ WWW/Internet
___ In-house sequence systems
___ Commercial ___ Oligomer ___ Score/Length
___ Interference ___ SPDI ___ Encode/Transl
_____ Other (specify)

Amendments to the Claims

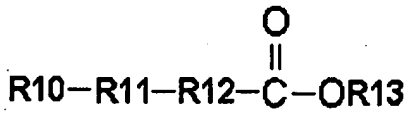
This listing of claims will replace all prior versions, and listings, of the claims in this application.

1 - 11. (Canceled)

12. (Previously Amended) A method of inducing ~~disease resistance~~ production of isoflavones in a plant comprising applying to the surface of at least part of a plant, which plant is capable of producing an isoflavone, a biologically effective amount of a composition comprising:

a) a nuclear receptor ligand, wherein said nuclear receptor ligand is a peroxisome proliferator having structure V below,

V



wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings,

R11 is an O or S,

R12 is a branched aliphatic chain comprising from 3 to 8 carbon atoms,

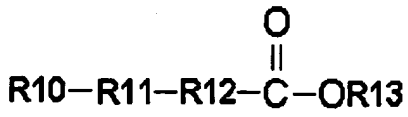
R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms; and

b) one or more compounds that i) enhance the release of isoflavones from a sugar conjugates, ii) enhance the incorporation of aglycones into glyceollin, or iii) enhance the release of isoflavones from sugar conjugates and incorporation of aglycones into glyceollin.

23. (Currently Amended) A composition for inducing disease resistance in a plant or seed, comprising:

(a) one or more nuclear receptor ligands having structure V below:

V



wherein R10 is an aromatic ring or rings, or a substituted aromatic ring or rings,

R11 is an O or S,

R12 is a branched aliphatic chain comprising from 1 to 8 carbon atoms,

R13 is a hydrogen or an aliphatic chain comprising from 1 to 5 carbon atoms; and

(b) one or more enhancing compounds that i) enhance the release of isoflavones from sugar conjugates in the plant or seed, ii) enhance incorporation of aglycones in the plant or seed into glyceollin, or iii) enhance release of isoflavones from sugar conjugates in the plant or seed and incorporation of aglycones in the plant or seed into glyceollin, wherein the enhancing compound ~~is a copper salt or a fragment of the naturally occurring cell wall glucan from *Phytophthora sojae*~~, is chosen from ion effectors, orthovanadate, rose bengal, and tetrazolium redox dyes.

24 – 43. (Canceled)

```
=> d his

     (FILE 'HOME' ENTERED AT 09:04:20 ON 25 OCT 2005)

     FILE 'HCAPLUS' ENTERED AT 09:04:31 ON 25 OCT 2005
L1            2 US2002004458/PN OR (US2001-781695# OR US2000-181707#)/AP,PRN

     FILE 'REGISTRY' ENTERED AT 09:05:25 ON 25 OCT 2005

     FILE 'HCAPLUS' ENTERED AT 09:05:25 ON 25 OCT 2005
L2              TRA L1 1- RN :       48 TERMS

     FILE 'REGISTRY' ENTERED AT 09:05:26 ON 25 OCT 2005
L3           48 SEA L2

     FILE 'WPIX' ENTERED AT 09:05:31 ON 25 OCT 2005
L4            2 L1

=> b hcap;d all l1 tot
FILE 'HCAPLUS' ENTERED AT 09:05:58 ON 25 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 25 Oct 2005  VOL 143 ISS 18
FILE LAST UPDATED: 24 Oct 2005  (20051024/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


L1   ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2001:597751  HCAPLUS
DN   135:163623
ED   Entered STN:  17 Aug 2001
TI   Diphenyl ether induction of systemic disease resistance in plants
IN   Haddad, William J.; Badenhop, Neil P.; Stammen, Alan D.; Bean, Theodore
     G.; Graham, Terrence L.; Graham, Lian-mei Y.; Landini, Serena
PA   Valent U.S.A. Corp., USA; The Ohio State University Research Foundation
SO   PCT Int. Appl., 45 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A01N063-00
CC   5-3 (Agrochemical Bioregulators)
FAN.CNT 2
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   WO 2001058268        A1    20010816    WO 2001-US3681         20010212 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
```

```
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
            YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    CA 2397364          AA    20010816    CA 2001-2397364        20010212 <--
    EP 1253826          A1    20021106    EP 2001-908847         20010212 <--
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    BR 2001008274       A     20030305    BR 2001-8274           20010212 <--
    JP 2003522135       T2    20030722    JP 2001-557392         20010212 <--
    ZA 2002006342       A     20031110    ZA 2002-6342           20020808
    US 2004033902       A1    20040219    US 2002-203513         20020812
PRAI US 2000-181686P    P     20000211
    US 2000-181707P     P     20000211  <--
    US 2000-181933P     P     20000211
    WO 2001-US3681      W     20010212
CLASS
 PATENT NO.       CLASS  PATENT FAMILY CLASSIFICATION CODES
 --------------   -----  ----------------------------------------------
 WO 2001058268    ICM    A01N063-00
 WO 2001058268    ECLA   A01N031/06; A01N031/08; A01N033/10; A01N033/22;
                         A01N037/02; A01N037/04; A01N037/06; A01N037/10;
                         A01N037/38; A01N037/48; A01N041/06; A01N043/16;
                         A01N043/22; A01N043/36; A01N043/54; A01N043/713;
                         A01N043/90                                    <--
 US 2004033902    NCL    504/322.000
                  ECLA   A01N033/22; A01N037/44; A01N037/48; A01N041/06
OS   MARPAT 135:163623
GI
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Di-Ph ethers I, II, and III (Markush included) in formulations applied to the surface of a plant induce a long-lasting systemic resistance in plants, thereby protecting the plants against plant pathogens and disease. Furthermore, application of a biol. active formulation containing di-Ph ethers results in an increase in the levels of plant isoflavones.

ST diphenyl ether systemic disease resistance soybean

IT Bean (Phaseolus limensis)
Soybean (Glycine max)
(di-Ph ether induction of systemic disease resistance in)

IT Flavones
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(isoflavones; increasing level in plants of; by application of di-Ph ethers)

IT Bean (Phaseolus vulgaris)
(pinto; di-Ph ether induction of systemic disease resistance in)

IT Disease resistance, plant
(systemic; induction of systemic disease resistance in plants with di-Ph ethers)

IT 1836-75-5, Nitrofen 1836-77-7, Chlornitrofen 13738-63-1, Fluoronitrofen 15457-05-3, Fluorodifen 32861-85-1, Chlomethoxyfen 42576-02-3, Bifenox 42874-01-1, Nitrofluorfen 42874-03-3, Oxyfluorfen 50594-66-6, Acifluorfen 72178-02-0, Fomesafen 74070-46-5, Aclonifen 77227-69-1, Halosafen 77501-60-1, Fluoroglycofen 77501-63-4, Lactofen 80020-41-3, Furyloxyfen
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(induction of systemic disease resistance in plants with)
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Anonymous; THE ARGOCHEMICALS HANDBOOK 1991, PA1317

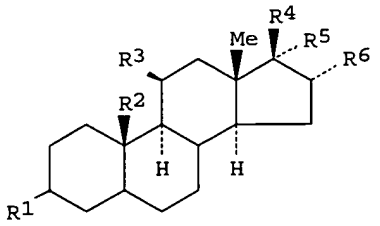
L1 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:597745 HCAPLUS
DN 135:148598
ED Entered STN: 17 Aug 2001
TI Inducing production of isoflavones in plants using nuclear receptor ligands
IN Graham, Terrence L.; Graham, Lian-mei Y.; Landini, Serena
PA Ohio State University Research Foundation, USA
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A01N031-00
ICS A01N035-00; A01N037-00; A01N037-44; A01N039-02
CC 5-3 (Agrochemical Bioregulators)
Section cross-reference(s): 11
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI WO 2001058262	A1	20010816	WO 2001-US4420	20010212	<--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
US 2002004458	A1	20020110	US 2001-781695	20010212	<--
PRAI US 2000-181707P	P	20000211	<--		

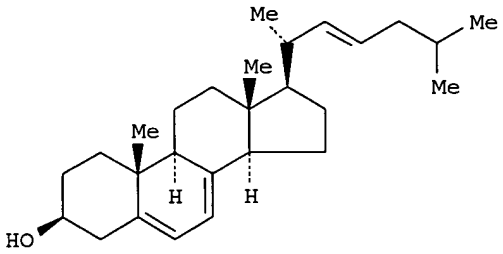
CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 2001058262	ICM	A01N031-00	
	ICS	A01N035-00; A01N037-00; A01N037-44; A01N039-02	
WO 2001058262	ECLA	A01N031/06; A01N031/08; A01N033/10; A01N033/22; A01N037/02; A01N037/04; A01N037/06; A01N037/10; A01N037/38; A01N039/02; A01N041/06; A01N043/16; A01N043/22; A01N043/36; A01N043/54; A01N043/713; A01N043/90; A01N045/00; A01N049/00	<--
US 2002004458	NCL	504/320.000	
	ECLA	A01N031/06; A01N031/08; A01N033/10; A01N037/02; A01N037/04; A01N037/06; A01N037/10; A01N037/38; A01N043/16; A01N043/22; A01N043/36; A01N043/54; A01N043/713; A01N043/90; A01N045/00	<--

OS MARPAT 135:148598
GI



I



II

AB Methods for increasing the levels of isoflavones in plants are provided. The method comprise applying a biol. effective amount of composition comprising a select nuclear receptor ligand to the plant. Compns. for inducing the production of isoflavones in plants are also provided. Such compns. comprise one or preferably, a combination of the select nuclear receptor ligands. The nuclear receptor ligand is: (a) a steroid I (rings A and B have the same or different degrees of saturation; R1 = O or OR ; R2,R5 = H, or Me; R3 = H, OH or O; R4 = R3, CO2H, COCH2OH or COMe; R6 = H, OH or OMe) or II; (b) a phenolic estrogen or di-Ph 4-HOC6H4R7C6H4OH-4 (R7 = bond, alkane or alkene); (c) a long-chain fatty acid R8CO2R9 (R8 = C5-25 aliphatic chain; R9 = H or C 1-5 aliphatic chain); (d) a peroxisome proliferator R10R11 R11R12CO2R13 (R10 = aromatic ring; R11 = O or S; R12, R13 = C1-8 aliphatic chain); or (e) zearalenone. The compns. also comprise a compound that enhances the capacity of the plant to release daidzein and/or utilize it for the production of glyceollin. The action of such a compound is complementary to that of the nuclear receptor ligand.

ST isoflavone prodn plant nuclear receptor ligands

IT Estrogens
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(agonists; nuclear receptor ligand inducer of isoflavone production in plants)

IT Nuclear receptors
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(ligands; inducers of isoflavone production in plants)

IT Fatty acids, biological studies
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(long-chain; nuclear receptor ligand inducer of isoflavone production in plants)

IT Peroxisome proliferators
(nuclear receptor ligand inducer of isoflavone production in plants)

IT Alfalfa (Medicago sativa)
Bean (Phaseolus limensis)
Chickpea (Cicer arietinum)
Peanut (Arachis hypogaea)
Plant (Embryophyta)
Soybean (Glycine max)
(nuclear receptor ligand inducers of isoflavone production in)

IT Bean (Phaseolus vulgaris)
(pinto; nuclear receptor ligand inducers of isoflavone production in)

IT Onium compounds

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(tetrazolium, redox dyes; enhancer of nuclear receptor ligand inducers of isoflavone production in plants)

IT 9012-72-0, glucan
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(Phytophthora sojae cell wall, fragment; enhancer of nuclear receptor ligand inducers of isoflavone production in plants)

IT 11121-48-5, Rose bengal 14333-18-7, Orthovanadate
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(enhancer of nuclear receptor ligand inducers of isoflavone production in plants)

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone 50-27-1, Estriol 50-28-2, 17β-Estradiol, biological studies 52-39-1, Aldosterone 53-06-5, Cortisone 53-16-7, Estrone, biological studies 53-41-8, Androsterone 56-53-1, Diethylstilbestrol 57-83-0, Progesterone, biological studies 57-87-4, Ergosterol 60-33-3, Linoleic acid, biological studies 84-16-2, Hexestrol 84-17-3, Dienestrol 112-79-8, Elaidic acid 112-80-1, Oleic acid, biological studies 145-13-1, Pregnenolone 446-72-0, Genistein 479-13-0, Coumesterol 486-66-8, Daidzein 506-32-1, Arachidonic acid 593-39-5, Petroselinic acid 882-09-7, Clofibric acid 6217-54-5 10417-94-4, Eicosapentaenoic acid 17413-79-5, 2-(2-Chlorophenoxy)-2-methylpropionic acid 17924-92-4, Zearalenone 52214-84-3, Ciprofibrate
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(nuclear receptor ligand inducer of isoflavone production in plants)

IT 446-72-0D, Genistein, conjugates 485-72-3D, Formononetin, aglycon 486-66-8D, Daidzein, aglycon 574-12-9, isoflavone
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(nuclear receptor ligand inducers of isoflavone production in plants)

=> b wpix;d all l4 tot
FILE 'WPIX' ENTERED AT 09:06:31 ON 25 OCT 2005
COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE LAST UPDATED: 24 OCT 2005 <20051024/UP>
MOST RECENT DERWENT UPDATE: 200568 <200568/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://thomsonderwent.com/coverage/latestupdates/ <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER
GUIDES, PLEASE VISIT:
http://thomsonderwent.com/support/userguides/ <<<

>>> NEW! FAST-ALERTING ACCESS TO NEWLY-PUBLISHED PATENT
DOCUMENTATION NOW AVAILABLE IN DERWENT WORLD PATENTS INDEX
FIRST VIEW - FILE WPIFV.
FOR FURTHER DETAILS: http://www.thomsonderwent.com/dwpifv <<<

>>> THE CPI AND EPI MANUAL CODES HAVE BEEN REVISED FROM UPDATE 200501.
PLEASE CHECK:
http://thomsonderwent.com/support/dwpiref/reftools/classification/code-revision/
FOR DETAILS. <<<
'BIX BI,ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

L4 ANSWER 1 OF 2 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2001-536494 [59] WPIX

CR 2001-529819 [58]
DNC C2001-159721
TI Method of triggering induced systemic resistance in plant by applying formulation comprising diphenyl ether, useful in combating plant pathogens by inducing isoflavone production.
DC C03 D16
IN BADENHOP, N P; BEAN, T G; GRAHAM, L Y; GRAHAM, T L; HADDAD, W J; LANDINI, S; STAMMEN, A D; GRAHAM, L M Y
PA (OHIS) UNIV OHIO STATE RES FOUND; (VALE-N) VALENT USA CORP; (BADE-I) BADENHOP N P; (BEAN-I) BEAN T G; (GRAH-I) GRAHAM L Y; (GRAH-I) GRAHAM T L; (HADD-I) HADDAD W J; (LAND-I) LANDINI S; (STAM-I) STAMMEN A D
CYC 95
PI WO 2001058268 A1 20010816 (200159)* EN 45 A01N063-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001036672 A 20010820 (200175) A01N063-00
EP 1253826 A1 20021106 (200281) EN A01N063-00
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR
BR 2001008274 A 20030305 (200322) A01N063-00
KR 2002091090 A 20021205 (200324) A01N031-14
CN 1398159 A 20030219 (200337) A01N063-00
JP 2003522135 W 20030722 (200350) 68 A01N039-02
US 2004033902 A1 20040219 (200414) A01N037-44
ZA 2002006342 A 20040128 (200420) 49 A01N000-00
MX 2002007773 A1 20041001 (200557) A01N063-00
ADT WO 2001058268 A1 WO 2001-US3681 20010212; AU 2001036672 A AU 2001-36672 20010212; EP 1253826 A1 EP 2001-908847 20010212, WO 2001-US3681 20010212; BR 2001008274 A BR 2001-8274 20010212, WO 2001-US3681 20010212; KR 2002091090 A KR 2002-710339 20020809; CN 1398159 A CN 2001-804740 20010212; JP 2003522135 W JP 2001-557392 20010212, WO 2001-US3681 20010212; US 2004033902 A1 WO 2001-US3681 20010212, US 2002-203513 20020812; ZA 2002006342 A ZA 2002-6342 20020808; MX 2002007773 A1 WO 2001-US3681 20010212, MX 2002-7773 20020809
FDT AU 2001036672 A Based on WO 2001058268; EP 1253826 A1 Based on WO 2001058268; BR 2001008274 A Based on WO 2001058268; JP 2003522135 W Based on WO 2001058268; MX 2002007773 A1 Based on WO 2001058268
PRAI US 2000-181933P 20000211; US 2000-181686P 20000211; **US 2000-181707P 20000211**; US 2002-203513 20020812
IC ICM A01N000-00; A01N031-14; A01N037-44; A01N039-02; A01N063-00
ICS A01G007-00; A01N033-22; A01N037-18; A01N041-06; A01N043-08
AB WO 200158268 A UPAB: 20050907
NOVELTY - Method of triggering induced systemic resistance (ISR) in a plant by applying an effective amount of a biologically active formulation comprising a diphenyl ether to the surface of at least a part of the plant, triggering activation of induced systemic resistance in the plant, thereby inducing systemic resistance to at least one pathogen or disease, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of increasing the levels of isoflavone in a plant by applying a biologically active formulation comprising a diphenyl ether to the surface of at least a part of the plant, inducing release or production of an isoflavone in the plant.

ACTIVITY - Induction of systemic plant resistance.

MECHANISM OF ACTION - None given.

USE - The method is for increasing plant yield, as it maintains or increases the general health of the plant, which preferably a lima bean, pinta bean or soybean (claimed).

ADVANTAGE - Systemic resistance lasts until the plant is harvested (claimed). The method also enhance the glyceollin elicitation competency of the treated plant. The formulation triggers ISR and increases the

isoflavone levels. Treatment of plants with the formulation leads to reduced incidence of pathogen or disease-caused plant damage, exhibiting the beneficial effects of ISR. Plants treated with the formulation are more robust and produce a higher yield upon harvest, suggesting that ISR is broad-based and non-specific, allowing a plant to grow unimpeded throughout the growing season. Advantages over prior art methods included broad spectrum control and less frequent applications. The method of the invention can increase plant yield by a minimum of 0.5% which is an economically significant increase on a large, multi-acre farm. Triggering of ISR and/or increased level of isoflavones results in a systemic resistance that lasts at least several weeks and possibly throughout the growing season and/or life of the plant. In tests, the exposed surfaces of snapped cotyledons were treated with 7 micro l of the diphenyl ether being tested, followed by 7 micro l glucan or water. Cotyledons were incubated in constant light (200 micro Einsteins) for 48 h. Fomesafen, Lactofen and Acifluofen lead to total isoflavone induction levels of 85, 64 and 56%, respectively. Their respective glyceollin induction values were 233, 181 and 122%.

Dwg.0/1

FS CPI

FA AB; DCN

MC CPI: C10-A08; C10-B02G; C10-B04A; C10-C03; C10-D03; C10-G02; C10-G03; C14-U01C

L4 ANSWER 2 OF 2 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2001-529819 [58] WPIX

CR 2001-536494 [59]

DNC C2001-158013

TI New method for combating plant pathogens comprises application of a nuclear ligand receptor capable of inducing isoflavone production to the surface of the plant .

DC C03 D16

IN BADENHOP, N P; BEAN, T G; GRAHAM, L M Y; GRAHAM, T L; HADDAD, W J; LANDINI, S; STAMMEN, A D; GRAHAM, L Y

PA (OHIS) UNIV OHIO STATE RES FOUND; (VALE-N) VALENT USA CORP; (GRAH-I) GRAHAM L Y; (GRAH-I) GRAHAM T L; (LAND-I) LANDINI S

CYC 94

PI WO 2001058262 A1 20010816 (200158)* EN 46 A01N031-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001036672 A 20010820 (200175) A01N063-00
AU 2001036906 A 20010820 (200175) A01N031-00
US 2002004458 A1 20020110 (200208) A01N037-00 <--
MX 2002007773 A1 20041001 (200557) A01N063-00

ADT WO 2001058262 A1 WO 2001-US4420 20010212; AU 2001036672 A AU 2001-36672 20010212; AU 2001036906 A AU 2001-36906 20010212; US 2002004458 A1 **Provisional US 2000-181707P 20000211, US 2001-781695 20010212**; MX 2002007773 A1 WO 2001-US3681 20010212, MX 2002-7773 20020809

FDT AU 2001036672 A Based on WO 2001058268; AU 2001036906 A Based on WO 2001058262; MX 2002007773 A1 Based on WO 2001058268

PRAI **US 2000-181707P 20000211**; US 2000-181686P 20000211; US 2000-181933P 20000211; **US 2001-781695 20010212**

IC ICM A01N031-00; A01N037-00; A01N063-00
ICS A01N035-00; A01N037-44; A01N039-02

AB WO 200158262 A UPAB: 20050907
NOVELTY - Method of inducing isoflavone production in plants comprises: (a) applying a composition containing a nuclear receptor ligand selected from a steroid (I) or (II), a phenolic estrogen (III), a long chain fatty acid (IV), a peroxisome proliferator (V) or a fungal steroid zearalenone (VI).

DETAILED DESCRIPTION - Method of inducing isoflavone production in plants comprises: (a) applying a composition containing a nuclear receptor ligand selected from a steroid of formulae (I) or (II), a phenolic estrogen of formula (III), a long chain fatty acid of formula (IV), a peroxisome proliferator of formula (V) or a fungal steroid zearalenone of formula (VI).

R1 = OH or O;
R2 = H or Me;
R3 = O, OH or H;
R4 = O, OH, H, CO2H, C(O)CH2OH or C(O)Me;
R5 = OH or H;
R6 = Me, OH or H;
R7 = single bond or optionally branched alkene or alkane;
R8 = optionally unsaturated 5-25C aliphatic chain;
R9 = H or 1-5C aliphatic chain;
R10 = aromatic ring or rings;
R11 = O or S;
R12 = 1-8C branched or linear aliphatic chain;
R13 = 1-5C aliphatic chain.

An INDEPENDENT CLAIM is also included for a composition for enhancing levels of isoflavones in a plant or seed comprising one or more compounds which enhance the activity of the nuclear receptor ligand, the nuclear receptor ligands being selected from compounds (I)-(VI).

ACTIVITY - Plant Protectant; Fungicide; Nematocide; Insecticide; Herbicide.

MECHANISM OF ACTION - Isoflavone production enhancer.

Levels of soybean leaf isoflavone were measured on treatment with ergosterol. After 48 hours, ergosterol at 10 micro M caused a 1.1-fold, 3-fold and 27-fold increase in genistein conjugates, diadzein aglycone and formononetin aglycone respectively. these results show that low concentrations of the nuclear receptor ligands induce isoflavones in soybean leaves, and redirect normal isoflavone metabolic pathways to produce new compounds.

USE - The method is for improving disease resistance in plants by inducing isoflavone production. It is expected that the invention will provide specific and/or broad spectrum disease control including prevention of fungal infections and infection by bacterial, viral and nematode pathogens. The composition can also be administered to seeds of the plant to increase isoflavones in sprouts of the seed thereby providing a highly beneficial food for human consumption.

ADVANTAGE - It was determined that plants treated with a formulation of the invention had a higher level of isoflavones than found in non-treated plants. In tests in the cut cotyledon assay over a range of concentrations (50-500 pM), the following activities for nuclear ligand receptors were obtained (expressed as the range of increase of isoflavones seen over this concentration range): progesterone 20-60%; androsterone 30-40%; hydrocortisone 25-50%; cortisone 30-100%; dexamethasone 0-10% and 5-pregnenolone 5-20%.

Dwg.0/13

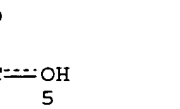
FS CPI
FA AB; GI; DCN
MC CPI: C01-A01; C01-A02; C01-C01; C01-C02; C01-C03; C01-C04; C01-D01; C01-D02; C05-A03B; C06-A02; C06-A03; C10-C03; C10-C04E; C10-E02; C14-A04; C14-B03A; C14-B04B; C14-U02; C14-V01; D05-H08

=> b home

FILE 'HOME' ENTERED AT 09:06:35 ON 25 OCT 2005

=>

```
=> b reg
FILE 'REGISTRY' ENTERED AT 11:26:18 ON 25 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   24 OCT 2005  HIGHEST RN 865981-77-7
DICTIONARY FILE UPDATES:  24 OCT 2005  HIGHEST RN 865981-77-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

*************************************************************************
*                                                                       *
* The CA roles and document type information have been removed from     *
* the IDE default display format and the ED field has been added,       *
* effective March 20, 2005.  A new display format, IDERL, is now        *
* available and contains the CA role and document type information.     *
*                                                                       *
*************************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d que sta l22
L9                SCR 1312 OR 1199
L10               SCR 1838
L11               SCR 1707 OR 1708
L15               SCR 2006
L17               SCR 2039 OR 2041 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 O
R 2043 OR 2054
L19               STR
```




```
VAR G1=O/S
REP G3=(1-8) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT   IS UNS  AT   1
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   6

STEREO ATTRIBUTES: NONE
L20               SCR 1700
```

L22 8781 SEA FILE=REGISTRY SSS FUL L19 AND L9 AND L10 AND L11 AND L15
AND L20 NOT L17

100.0% PROCESSED 665572 ITERATIONS 8781 ANSWERS
SEARCH TIME: 00.00.13

=> d ide l25 tot

L25 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN **11121-48-5** REGISTRY
ED Entered STN: 16 Nov 1984
CN Rose Bengal (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Bengal Rose
CN Rose Bengale
MF Unspecified
CI COM, MAN
LC STN Files: AGRICOLA, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

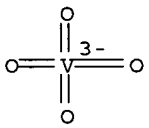
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2420 REFERENCES IN FILE CA (1907 TO DATE)
100 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2423 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d ide l26 tot

L26 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN **14333-18-7** REGISTRY
ED Entered STN: 16 Nov 1984
CN Vanadate (VO43-), (T-4)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Vanadate (VO43-) (8CI)
OTHER NAMES:
CN Orthovanadate
CN Tetraoxovanadate(3-)
CN Vanadate (VO43-) ion
CN Vanadate ion (VO43-)
DR 76008-43-0
MF O4 V
CI CCS, COM
LC STN Files: AGRICOLA, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, DDFU, DRUGU, EMBASE, NIOSHTIC, TOXCENTER, USPAT2, USPATFULL



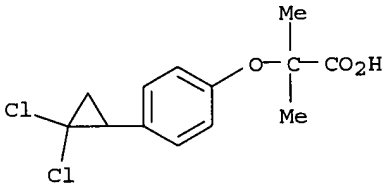
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1367 REFERENCES IN FILE CA (1907 TO DATE)
68 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1367 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d ide l47 tot

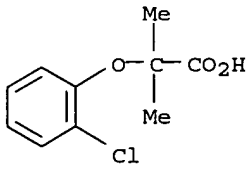
L47 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2005 ACS on STN
RN **52214-84-3** REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanoic acid, 2-[4-(2,2-dichlorocyclopropyl)phenoxy]-2-methyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN (±)-Ciprofibrate
CN 2-[p-(2,2-Dichlorocyclopropyl)phenoxy]-2-methylpropionic acid
CN Ciprofibrate
CN Ciprol
CN Lipanor
CN Modalim
CN Win 35833
FS 3D CONCORD
DR 128660-46-8
MF **C13 H14 Cl2 O3**
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK*, NIOSHTIC, PHAR, PROMT, PROUSDDR, PS, RTECS*, SCISEARCH, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

522 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
522 REFERENCES IN FILE CAPLUS (1907 TO DATE)

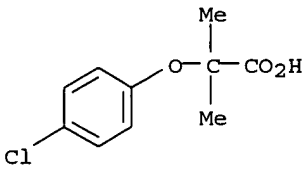
L47 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2005 ACS on STN
RN **17413-79-5** REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanoic acid, 2-(2-chlorophenoxy)-2-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propionic acid, 2-(o-chlorophenoxy)-2-methyl- (6CI, 8CI)
OTHER NAMES:
CN α-(o-Chlorophenoxy)isobutyric acid
CN 2-(2-Chlorophenoxy)-2-methylpropionic acid
CN o-Chlorophenoxyisobutyric acid
FS 3D CONCORD
MF **C10 H11 Cl O3**
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, IFICDB, IFIPAT, IFIUDB, RTECS*, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

39 REFERENCES IN FILE CA (1907 TO DATE)
39 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L47 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2005 ACS on STN
RN **882-09-7** REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanoic acid, 2-(4-chlorophenoxy)-2-methyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propionic acid, 2-(p-chlorophenoxy)-2-methyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN (p-Chlorophenoxy)isobutyric acid
CN α-(4-Chlorophenoxy)-α-methylpropionic acid
CN α-(4-Chlorophenoxy)isobutyric acid
CN α-(p-Chlorophenoxy)isobutyric acid
CN 2-(4-Chlorophenoxy)-2-methylpropanoic acid
CN 2-(4-Chlorophenoxy)-2-methylpropionic acid
CN 2-(p-Chlorophenoxy)-2-methylpropionic acid
CN 2-(p-Chlorophenoxy)isobutyric acid
CN 2-[(4-Chlorophenyl)oxy]-2-methylpropionic acid
CN 4-Chlorophenoxyisobutyric acid
CN Arteriohom
CN Chlorfibrinic acid
CN Chlorofibrinic acid
CN Chlorophibrinic acid
CN Clofibrate free acid
CN Clofibric acid
CN Clofibrilic acid
CN Clofibrin
CN Clofibrinic acid
CN CPIB
CN CPIBA
CN NSC 1149
CN PCIB
CN PCPIB
CN Regadrin
CN Regulipid
FS 3D CONCORD
DR 60120-73-2, 94592-92-4
MF **C10 H11 Cl O3**
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PROMT, PS, RTECS*, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1231 REFERENCES IN FILE CA (1907 TO DATE)
32 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1238 REFERENCES IN FILE CAPLUS (1907 TO DATE)
26 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> d his full

(FILE 'HOME' ENTERED AT 09:04:20 ON 25 OCT 2005)

FILE 'HCAPLUS' ENTERED AT 09:04:31 ON 25 OCT 2005
L1 2 SEA ABB=ON PLU=ON US2002004458/PN OR (US2001-781695# OR US2000-181707#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 09:05:25 ON 25 OCT 2005

FILE 'HCAPLUS' ENTERED AT 09:05:25 ON 25 OCT 2005
L2 TRA L1 1- RN : 48 TERMS

FILE 'REGISTRY' ENTERED AT 09:05:26 ON 25 OCT 2005
L3 48 SEA ABB=ON PLU=ON L2

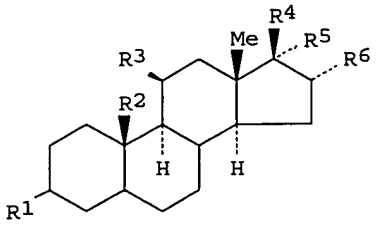
FILE 'WPIX' ENTERED AT 09:05:31 ON 25 OCT 2005
L4 2 SEA ABB=ON PLU=ON US2002004458/PN OR (US2001-781695# OR US2000-181707#)/AP,PRN

FILE 'REGISTRY' ENTERED AT 09:10:15 ON 25 OCT 2005
L5 STR
L6 41 SEA SSS SAM L5
L7 STR L5
L8 39 SEA SSS SAM L7
L9 SCR 1312 OR 1199
L10 SCR 1838
L11 SCR 1707 OR 1708
D QUE STA L8
L12 50 SEA SSS SAM L7 AND L9 AND L10 AND L11
L13 STR L7
L14 0 SEA CSS SAM L13 AND L9 AND L10 AND L11
L15 SCR 2006
L16 0 SEA CSS SAM L13 AND L9 AND L10 AND L11 AND L15
L17 SCR 2039 OR 2041 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 OR 204
L18 50 SEA SSS SAM L13 AND L9 AND L10 AND L11 AND L15 NOT L17
L19 STR L13
L20 SCR 1700
L21 22 SEA SSS SAM L19 AND L9 AND L10 AND L11 AND L15 AND L20 NOT L17
L22 8781 SEA SSS FUL L19 AND L9 AND L10 AND L11 AND L15 AND L20 NOT L17
SAV TEM PRY695F0/A L22
L23 STR L13
L24 50 SEA SSS SAM L23 AND L9 AND L10 AND L11 AND L15 NOT L17
L25 1 SEA ABB=ON PLU=ON L3 AND 11121-48-5
L26 1 SEA ABB=ON PLU=ON L3 AND 14333-18-7
L27 38 SEA ABB=ON PLU=ON O4V AND CCS/CI
L28 20 SEA ABB=ON PLU=ON L27 NOT VANADIUM

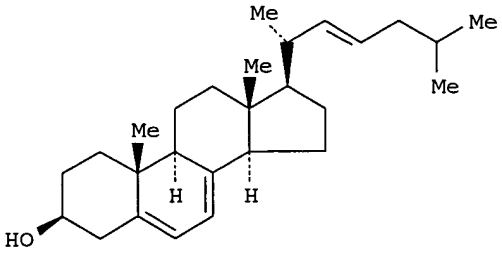
```
L29          18 SEA ABB=ON  PLU=ON  L27 NOT L28
L30          38 SEA ABB=ON  PLU=ON  (L27 OR L28 OR L29)

     FILE 'HCAPLUS' ENTERED AT 09:38:26 ON 25 OCT 2005
L31        1496 SEA ABB=ON  PLU=ON  L30
L32       24690 SEA ABB=ON  PLU=ON  ORTHOVANADATE? OR VANADATE?
                E ORTHOVANDAT/CT
                E ORTHOVANADATE/CT
                E E3+ALL
L33        1367 SEA ABB=ON  PLU=ON  ORTHOVANADATE/CT
L34        2423 SEA ABB=ON  PLU=ON  L25
L35        4302 SEA ABB=ON  PLU=ON  BENGAL (1A)ROSE
L36        7033 SEA ABB=ON  PLU=ON  L22
L37           5 SEA ABB=ON  PLU=ON  L36 AND (L31 OR L32 OR L33 OR L34 OR L35)
                E GRAHAM T/AU
L38          52 SEA ABB=ON  PLU=ON  ("GRAHAM T"/AU OR "GRAHAM T L"/AU)
                E GRAHAM TERRENCE/AU
L39          16 SEA ABB=ON  PLU=ON  "GRAHAM TERRENCE L"/AU
                E GRAHAM L/AU
L40          35 SEA ABB=ON  PLU=ON  ("GRAHAM L"/AU OR "GRAHAM L M"/AU)
                E GRAHAM LIAN/AU
L41           2 SEA ABB=ON  PLU=ON  "GRAHAM LIAN MEI Y"/AU
                D BIB L1
                E LANDINI S/AU
L42           9 SEA ABB=ON  PLU=ON  ("LANDINI S"/AU OR "LANDINI SERENA"/AU)
L43           0 SEA ABB=ON  PLU=ON  L37 AND (L38 OR L39 OR L40 OR L41 OR L42)

     FILE 'REGISTRY' ENTERED AT 09:44:20 ON 25 OCT 2005
L44           0 SEA ABB=ON  PLU=ON  L22 AND L3
L45          25 SEA ABB=ON  PLU=ON  L3 AND 46.150.18/RID AND (O OR S)/ELS
L46          25 SEA ABB=ON  PLU=ON  L45 AND O>=2
L47           3 SEA ABB=ON  PLU=ON  L46 AND (C10H11CLO3 OR C13H14CL2O3)

     FILE 'HCAPLUS' ENTERED AT 09:48:52 ON 25 OCT 2005
L48        1719 SEA ABB=ON  PLU=ON  L47
L49           3 SEA ABB=ON  PLU=ON  L47 AND (L31 OR L32 OR L33 OR L34 OR L35)
L50           1 SEA ABB=ON  PLU=ON  L49 AND (L38 OR L39 OR L40 OR L41 OR L42)
L51           2 SEA ABB=ON  PLU=ON  L49 NOT L50
L52        2801 SEA ABB=ON  PLU=ON  FLAVONES+OLD,NT/CT (L) (ISO OR ISOFLAVONE?)
                E ONIUM COMPOUNDS/CT
                E E3+ALL
L53          17 SEA ABB=ON  PLU=ON  ONIUM COMPOUNDS+NT/CT (L)(TETRAZOL? (L)
                REDOX)
                E TRAZOL/CT
                E TETRAZOL/CT
L54           1 SEA ABB=ON  PLU=ON  L53 AND (L22 OR L47)
L55          15 SEA ABB=ON  PLU=ON  L52 AND (L22 OR L47)
L56           1 SEA ABB=ON  PLU=ON  L55 AND (L38 OR L39 OR L40 OR L41 OR L42)
L57          14 SEA ABB=ON  PLU=ON  L55 NOT L56
L58       35443 SEA ABB=ON  PLU=ON  FLAVONES+OLD,NT/CT
L59         142 SEA ABB=ON  PLU=ON  L58 AND (L22 OR L47)
L60           3 SEA ABB=ON  PLU=ON  ONIUM COMPOUNDS+NT/CT (L)TETRAZOL? AND
                (L22 OR L47)
L61           1 SEA ABB=ON  PLU=ON  L60 AND (L38 OR L39 OR L40 OR L41 OR L42)
L62           2 SEA ABB=ON  PLU=ON  L60 NOT L61
L63           2 SEA ABB=ON  PLU=ON  ROSE (1A)BENGAL# AND (L22 OR L47)
L64           1 SEA ABB=ON  PLU=ON  L63 AND (L38 OR L39 OR L40 OR L41 OR L42)
L65           1 SEA ABB=ON  PLU=ON  L63 NOT L64
L66           1 SEA ABB=ON  PLU=ON  (L50 OR L54 OR L56 OR L61 OR L64)
L67           5 SEA ABB=ON  PLU=ON  (L51 OR L62 OR L65)

     FILE 'EMBASE' ENTERED AT 11:39:13 ON 25 OCT 2005
L68        3113 SEA ABB=ON  PLU=ON  (L22 OR L47)
L69         909 SEA ABB=ON  PLU=ON  CIPROFIBRATE OR CIPRL# OR LIPANOR# OR
                MODALIM# OR WIN35833 OR WIN35(W)833 OR WIN(W)(35833 OR
                35(W)833)
```

```
L70         1059 SEA ABB=ON  PLU=ON  (CHLORFIBRINIC OR CHLOROFIBRINIC OR
                 CLOFIBRIC)(2A)ACID OR CLOFIBRIN OR CPIB# OR PCIB OR PCPIB OR
                 REGADRIN# OR REGULIPID
L71           95 SEA ABB=ON  PLU=ON  (CHLOROPHENOXY OR CHLORO(W)PHENOXY)
                 (1A)(ISOBUTYRIC OR METHYLPROPIONIC)(1A)ACID OR (CHLOROPHENOXYIS
                 OBUTYRIC OR CHLOROPHENOXYMETHYLPROPIONIC)(W)ACID
L72         3409 SEA ABB=ON  PLU=ON  (L68 OR L69 OR L70 OR L71)

     FILE 'BIOSIS' ENTERED AT 11:50:27 ON 25 OCT 2005
L73         2315 SEA ABB=ON  PLU=ON  (L68 OR L69 OR L70 OR L71)
L74            0 SEA ABB=ON  PLU=ON  (ISO (1A)FLAVONE# OR ISOFLAVONE#) AND L73

     FILE 'EMBASE' ENTERED AT 11:53:06 ON 25 OCT 2005
L75         6042 SEA ABB=ON  PLU=ON  (L31 OR L32 OR L34)
L76         2031 SEA ABB=ON  PLU=ON  ROSE (1A)BENGAL#
                 E ISOFLAVONE/CT
                 E E3+ALL
                 E ISOFLAVONES/CT
                 E E3+ALL
                 E E2+ALL
L77         1108 SEA ABB=ON  PLU=ON  ISOFLAVONE DERIVATIVE/CT
L78            0 SEA ABB=ON  PLU=ON  L72 AND L77

     FILE 'MEDLINE' ENTERED AT 11:54:12 ON 25 OCT 2005
L79         1890 SEA ABB=ON  PLU=ON  (L68 OR L69 OR L70 OR L71)
                 E ISOFLAVONES/CT
L80            0 SEA ABB=ON  PLU=ON  ISOFLAVONES+NT/CT AND L79

     FILE 'AGRICOLA' ENTERED AT 11:55:11 ON 25 OCT 2005
L81          111 SEA ABB=ON  PLU=ON  (L68 OR L69 OR L70 OR L71)
                 E ISOFLAVONES/CT
                 E E3+ALL
L82            0 SEA ABB=ON  PLU=ON  ISOFLAVONES+NT/CT AND L81

     FILE 'CABA' ENTERED AT 11:55:47 ON 25 OCT 2005
L83        18893 SEA ABB=ON  PLU=ON  (L68 OR L69 OR L70 OR L71)
                 E ISOFLAVONES/CT
                 E E3+ALL
L84            4 SEA ABB=ON  PLU=ON  ISOFLAVONES+NT/CT AND L83

=> b hcap

FILE 'HCAPLUS' ENTERED AT 11:56:58 ON 25 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 25 Oct 2005  VOL 143 ISS 18
FILE LAST UPDATED: 24 Oct 2005  (20051024/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.
```

```
=> d all fhitstr l66 tot

L66  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2001:597745  HCAPLUS
DN   135:148598
ED   Entered STN:  17 Aug 2001
TI   Inducing production of isoflavones in plants using nuclear receptor
     ligands
IN   Graham, Terrence L.; Graham, Lian-mei Y.;
     Landini, Serena
PA   Ohio State University Research Foundation, USA
SO   PCT Int. Appl., 46 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A01N031-00
     ICS  A01N035-00; A01N037-00; A01N037-44; A01N039-02
CC   5-3 (Agrochemical Bioregulators)
     Section cross-reference(s): 11
FAN.CNT 2
     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
PI   WO 2001058262         A1    20010816    WO 2001-US4420          20010212
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2002004458          A1    20020110    US 2001-781695          20010212
PRAI US 2000-181707P        P     20000211
CLASS
 PATENT NO.        CLASS   PATENT FAMILY CLASSIFICATION CODES
 ---------------   -----   ----------------------------------------------
 WO 2001058262     ICM     A01N031-00
                   ICS     A01N035-00; A01N037-00; A01N037-44; A01N039-02
 WO 2001058262     ECLA    A01N031/06; A01N031/08; A01N033/10; A01N033/22;
                           A01N037/02; A01N037/04; A01N037/06; A01N037/10;
                           A01N037/38; A01N039/02; A01N041/06; A01N043/16;
                           A01N043/22; A01N043/36; A01N043/54; A01N043/713;
                           A01N043/90; A01N045/00; A01N049/00
 US 2002004458     NCL     504/320.000
                   ECLA    A01N031/06; A01N031/08; A01N033/10; A01N037/02;
                           A01N037/04; A01N037/06; A01N037/10; A01N037/38;
                           A01N043/16; A01N043/22; A01N043/36; A01N043/54;
                           A01N043/713; A01N043/90; A01N045/00
OS   MARPAT 135:148598
GI
```



I



II

AB Methods for increasing the levels of isoflavones in plants are provided. The method comprise applying a biol. effective amount of composition comprising a select nuclear receptor ligand to the plant. Compns. for inducing the production of isoflavones in plants are also provided. Such compns. comprise one or preferably, a combination of the select nuclear receptor ligands. The nuclear receptor ligand is: (a) a steroid I (rings A and B have the same or different degrees of saturation; R1 = O or OR ; R2,R5 = H, or Me; R3 = H, OH or O; R4 = R3, CO2H, COCH2OH or COMe; R6 = H, OH or OMe) or II; (b) a phenolic estrogen or di-Ph 4-HOC6H4R7C6H4OH-4 (R7 = bond, alkane or alkene); (c) a long-chain fatty acid R8CO2R9 (R8 = C5-25 aliphatic chain; R9 = H or C 1-5 aliphatic chain); (d) a peroxisome proliferator R10R11 R11R12CO2R13 (R10 = aromatic ring; R11 = O or S; R12, R13 = C1-8 aliphatic chain); or (e) zearalenone. The compns. also comprise a compound that enhances the capacity of the plant to release daidzein and/or utilize it for the production of glyceollin. The action of such a compound is complementary to that of the nuclear receptor ligand.

ST isoflavone prodn plant nuclear receptor ligands

IT Estrogens
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(agonists; nuclear receptor ligand inducer of isoflavone production in plants)

IT Nuclear receptors
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(ligands; inducers of isoflavone production in plants)

IT Fatty acids, biological studies
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(long-chain; nuclear receptor ligand inducer of isoflavone production in plants)

IT Peroxisome proliferators
(nuclear receptor ligand inducer of isoflavone production in plants)

IT Alfalfa (Medicago sativa)
Bean (Phaseolus limensis)
Chickpea (Cicer arietinum)
Peanut (Arachis hypogaea)
Plant (Embryophyta)
Soybean (Glycine max)
(nuclear receptor ligand inducers of isoflavone production in)

IT Bean (Phaseolus vulgaris)
(pinto; nuclear receptor ligand inducers of isoflavone production in)

IT **Onium compounds**

RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(**tetrazolium**, **redox** dyes; enhancer of nuclear receptor ligand inducers of isoflavone production in plants)

IT 9012-72-0, glucan
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(Phytophthora sojae cell wall, fragment; enhancer of nuclear receptor ligand inducers of isoflavone production in plants)

IT **11121-48-5**, **Rose bengal** **14333-18-7**, **Orthovanadate**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(enhancer of nuclear receptor ligand inducers of isoflavone production in plants)

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone 50-27-1, Estriol 50-28-2, 17β-Estradiol, biological studies 52-39-1, Aldosterone 53-06-5, Cortisone 53-16-7, Estrone, biological studies 53-41-8, Androsterone 56-53-1, Diethylstilbestrol 57-83-0, Progesterone, biological studies 57-87-4, Ergosterol 60-33-3, Linoleic acid, biological studies 84-16-2, Hexestrol 84-17-3, Dienestrol 112-79-8, Elaidic acid 112-80-1, Oleic acid, biological studies 145-13-1, Pregnenolone 446-72-0, Genistein **479-13-0**, Coumesterol 486-66-8, Daidzein 506-32-1, Arachidonic acid 593-39-5, Petroselinic acid **882-09-7**, Clofibric acid 6217-54-5 10417-94-4, Eicosapentaenoic acid **17413-79-5**, 2-(2-Chlorophenoxy)-2-methylpropionic acid 17924-92-4, Zearalenone **52214-84-3**, Ciprofibrate
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(nuclear receptor ligand inducer of **isoflavone** production in plants)

IT 446-72-0D, Genistein, conjugates 485-72-3D, Formononetin, aglycon 486-66-8D, Daidzein, aglycon 574-12-9, isoflavone
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(nuclear receptor ligand inducers of isoflavone production in plants)

IT **11121-48-5**, **Rose bengal**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(enhancer of nuclear receptor ligand inducers of isoflavone production in plants)

RN 11121-48-5 HCAPLUS
CN Rose Bengal (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

=> d all hitstr l67 tot

L67 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:536657 HCAPLUS
DN 131:281336
ED Entered STN: 27 Aug 1999
TI Phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate
AU Passilly, Patricia; Schohn, Herve; Jannin, Brigitte; Malki, Mustapha Cherkaoui; Boscoboïnik, Daniel; Dauca, Michel; Latruffe, Norbert
CS Universite de Bourgogne, Laboratoire de Biologie Moleculaire et Cellulaire, Faculte des Sciences, Dijon, 21000, Fr.
SO Biochemical Pharmacology (1999), 58(6), 1001-1008
CODEN: BCPCA6; ISSN: 0006-2952
PB Elsevier Science Inc.
DT Journal
LA English
CC 1-10 (Pharmacology)
AB The basic mechanism(s) by which peroxisome proliferators activate peroxisome proliferator-activated receptors (PPARs) is (are) not yet fully understood. Given the diversity of peroxisome proliferators, several hypotheses of activation have been proposed. Among them is the notion that peroxisome proliferators could activate PPARs by changing their

phosphorylation status. In fact, it is well known that several members of the nuclear hormone receptor superfamily are regulated by phosphorylation. In this report, we show that the rat Fao hepatic-derived cell line, known to respond to peroxisome proliferators, exhibited a high content of PPARα. Alkaline phosphatase treatment of Fao cell lysate as well as immunopptn. of PPARα from cells prelabeled with [32P] orthophosphate clearly showed that PPARα is indeed a phosphoprotein in vivo. Moreover, treatment of rat Fao cells with ciprofibrate, a peroxisome proliferator, increased the phosphorylation level of the PPARα. In addition, treatment of Fao cells with phosphatase inhibitors (okadaic acid and sodium **orthovanadate**) decreased the activity of ciprofibrate-induced peroxisomal acyl-CoA oxidase, an enzyme encoded by a PPARα target gene. Our results suggest that the gene expression controlled by peroxisome proliferators could be mediated in part by a modulation of the PPARα effect via a modification of the phosphorylation level of this receptor.

ST peroxisome proliferator ciprofibrate PPAR phosphorylation liver

IT Animal cell line
(Fao; phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate)

IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(for PPARα; phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate)

IT Hypolipemic agents
Liver
Peroxisome proliferators
(phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate)

IT Phosphorylation, biological
(protein; phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate)

IT Peroxisome proliferator-activated receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(α; phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate)

IT **52214-84-3**, Ciprofibrate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate)

IT 61116-22-1, Acyl-CoA oxidase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate)

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

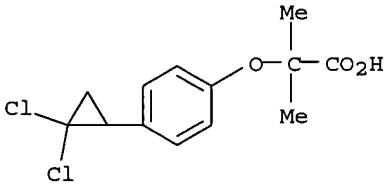
(1) Adams, M; J Biol Chem 1997, V272, P5128 HCAPLUS
(2) Aldridge, T; Biochem J 1995, V306, P473 HCAPLUS
(3) Avrameas, S; Immunochemistry 1969, V6, P43 HCAPLUS
(4) Bayly, A; J Cell Sci 1993, V104, P307 HCAPLUS
(5) Berger, J; Endocrinology 1996, V137, P4189 HCAPLUS
(6) Bradford, M; Anal Biochem 1976, V73, P248
(7) Braissant, O; Endocrinology 1996, V137, P354 HCAPLUS
(8) Brandes, R; FEBS Lett 1991, V285, P63 HCAPLUS
(9) Brocard, C; Biol Cell 1993, V77, P37 HCAPLUS
(10) Camp, H; J Biol Chem 1997, V272, P10811 HCAPLUS
(11) Deschatrette, J; Biochimie 1974, V56, P1603 HCAPLUS
(12) Devchand, P; Nature 1996, V384, P39 HCAPLUS
(13) Dreyer, C; Biol Cell 1993, V77, P67 HCAPLUS
(14) Forman, B; Proc Natl Acad Sci 1997, V94, P4312 HCAPLUS
(15) Goedert, M; Neuron 1992, V8, P159 HCAPLUS

(16) Goodfriend, T; Science 1964, V144, P1344 MEDLINE
(17) Hertz, R; Eur J Biochem 1996, V235, P242 HCAPLUS
(18) Hu, E; Science 1996, V274, P2100 HCAPLUS
(19) Issemann, I; J Mol Endocrinol 1993, V11, P37 HCAPLUS
(20) Issemann, I; Nature 1990, V347, P645 HCAPLUS
(21) Jackson, S; Trends Cell Biol 1992, V2, P104 HCAPLUS
(22) Keller, H; Proc Natl Acad Sci 1993, V90, P2160 HCAPLUS
(23) Laemmli, U; Nature 1970, V227, P680 HCAPLUS
(24) Latruffe, N; Biochimie 1997, V79, P81 HCAPLUS
(25) Lemberger, T; Annu Rev Cell Dev Biol 1996, V12, P335 HCAPLUS
(26) Motojima, K; Ann New York Acad Sci 1996, V804, P413 HCAPLUS
(27) Motojima, K; FEBS Lett 1993, V319, P75 HCAPLUS
(28) Motojima, K; J Biol Chem 1994, V269, P9030 HCAPLUS
(29) Orellana, A; Eur J Biochem 1990, V190, P57 HCAPLUS
(30) Orellana, A; Eur J Biochem 1993, V215, P903 HCAPLUS
(31) Passilly, P; Eur J Biochem 1995, V230, P316 HCAPLUS
(32) Pitot, H; Natl Cancer Inst Monogr 1964, V13, P229 MEDLINE
(33) Poirier, H; FEBS Lett 1997, V412, P480 HCAPLUS
(34) Ristow, M; N Engl J Med 1998, V339, P953 MEDLINE
(35) Scotto, C; Eur J Cell Biol 1995, V66, P375 HCAPLUS
(36) Shalev, A; Endocrinology 1996, V137, P4499 HCAPLUS
(37) Tugwood, J; EMBO J 1992, V11, P433 HCAPLUS
(38) Vamecq, J; Anal Biochem 1990, V186, P340 HCAPLUS
(39) Zhang, B; J Biol Chem 1996, V271, P31771 HCAPLUS

IT **52214-84-3**, Ciprofibrate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phosphorylation of peroxisome proliferator-activated receptor α in rat fao cells and stimulation by ciprofibrate)

RN 52214-84-3 HCAPLUS

CN Propanoic acid, 2-[4-(2,2-dichlorocyclopropyl)phenoxy]-2-methyl- (9CI) (CA INDEX NAME)



L67 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:400277 HCAPLUS

DN 117:277

ED Entered STN: 11 Jul 1992

TI Mechanism of allergic cross-reactions. I. Multispecific binding of ligands to a mouse monoclonal anti-DNP IgE antibody

AU Varga, Janos M.; Kalchschmid, Gertrud; Klein, Georg F.; Fritsch, Peter

CS Dep. Dermatol., Univ. Innsbruck, Innsbruck, 6020, Austria

SO Molecular Immunology (1991), 28(6), 641-54
CODEN: MOIMD5; ISSN: 0161-5890

DT Journal

LA English

CC 1-3 (Pharmacology)
Section cross-reference(s): 4, 15

AB A recently developed solid-phase binding assay was used to investigate the specificity of ligand binding to a mouse monoclonal anti-dinitrophenyl IgE (I). All DNP-amino acids, that were tested inhibited the binding of the radio-labeled I to DNP covalently attached to polystyrene microplates; however, the concentration for 50% inhibition varied within four orders of magnitude, DNP-L-serine being the most and DNP-L-proline the least potent inhibitor. In addition to DNP analogs, a large number of drugs and other

compds. were tested for their ability to compete with DNP for the binding site of I. At the concentration used for screening, 59% of compds. had no significant inhibition; 19% inhibited the binding of I more than 50%. Several families of compds. (tetracyclines, polymyxins, phenothiazines, salicylates, and quinones) that were effective competitors were found. Within these families, changes in the functional groups attached to the family stem had major effects on the affinity of ligand binding. The occurrence frequencies of interactions of ligands with I is in good agreement with the semi-empirical model for multispecific antibody-ligand interactions.

ST antibody drug interaction cross reaction; allergy immediate hypersensitivity antibody ligand; IgE ligand cross reaction

IT Antibiotics
Chemicals
Pharmaceuticals
Ligands
Quinones
Sulfonamides
RL: BIOL (Biological study)
(antibodies to dinitrophenol binding by, allergic cross-reaction mechanism in relation to)

IT Hemoglobins
Keratins
Saponins
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-reaction mechanism in relation to)

IT Immunoglobulins
RL: BIOL (Biological study)
(E, monoclonal, to dinitrophenol, drugs and other chemical binding to, allergic cross-reaction mechanism in relation to)

IT Molecular structure-biological activity relationship
(antibody-binding, allergic cross-reaction, of drugs and other chems.)

IT Amino acids, biological studies
RL: BIOL (Biological study)
(dinitrophenyl, antibodies to dinitrophenol binding by, allergic cross-reaction mechanism in relation to)

IT Allergy
(immediate hypersensitivity, mechanism of, antibody to dinitrophenol binding by drugs and other chems. in relation to)

IT 60-54-8D, derivs. 69-72-7D, Salicylic acid, derivs. 92-84-2D, Phenothiazine, derivs. 1406-11-7D, Polymyxin, derivs.
RL: BIOL (Biological study)
(antibodies to dinitrophenol binding by, allergic cross-reaction mechanism in relation to)

IT 50-02-2 50-10-2 50-12-4, Mesantoin 50-18-0, Endoxan 50-29-3, DDT, biological studies 50-33-9, Phebuzine, biological studies 50-34-0 50-44-2, Mercaptopurine 50-65-7 50-70-4, Sorbit, biological studies 51-05-8, Procaine hydrochloride 51-18-3, Tretamin 51-21-8, 5-Fluoro-uracil 51-41-2, Levarterenol 51-67-2 51-83-2 52-01-7, Spironolactone 52-49-3 52-62-0 52-86-8, Haloperidol 53-43-0 53-60-1, Promazine hydrochloride 53-86-1 54-03-5, Ustimon 54-31-9, Furosemid 54-32-0, Opilon 54-36-4, Metyrapone 54-42-2, Idoxuridine 54-49-9 54-64-8, Thimerosal 54-71-7, Pilocarpine hydrochloride 54-85-3 54-91-1, Pipobroman 54-92-2, Iproniazide 54-96-6, 3,4-Pyridinediamine 55-03-8, Sodium thyroxine 55-06-1 55-10-7 55-16-3, Scopolamine hydrochloride 55-22-1, Isonicotinic acid, biological studies 55-55-0, Metol 55-65-2 55-92-5, Methacholine 55-97-0 56-38-2, Parathion 56-55-3, Benz[a]anthracene 56-92-8 57-48-7, Levulose, biological studies 57-50-1, Saccharose, biological studies 57-53-4 57-64-7 57-66-9, Probenecid 57-83-0, Proluton, biological studies 57-87-4 57-94-3 58-14-0, Pyrimethamine 58-15-1, Pyramidon 58-20-8, Testosterone-cyclopentylpropionate 58-27-5, Menadione 58-28-6, Desipramine hydrochloride 58-32-2, Persantin 58-38-8, Prochlorperazine 58-39-9, Perphenazine 58-46-8 58-54-8 58-55-9, Theophyllin, biological studies 58-73-1, Diphenhydramine

58-74-2 58-86-6, D(+)-Xylose, biological studies 59-05-2, Methotrexate
59-06-3, Ethopabate 59-32-5, Synopen 59-33-6, Pyrilamine maleate
59-43-8, Thiamine, biological studies 59-47-2 59-63-2, Marplan
59-66-5, Diamox 59-97-2 59-99-4, Prostigmine 60-56-0, Methimazole
60-57-1, Dieldrin 60-80-0 60-81-1 60-89-9, Pacatal 60-99-1,
Levomepromazine 61-12-1 61-16-5 61-25-6, Papaverine hydrochloride
61-68-7 61-96-1, Nordefrin hydrochloride 62-13-5 62-44-2,
Phenacetine 62-55-5, Thioacetamide 62-59-9, Veratrine 62-68-0,
Proadifen hydrochloride 63-42-3, Lactose 63-45-6, Primaquine phosphate
63-74-1, Sulfanilamide 63-92-3, Phenoxybenzamine hydrochloride
64-10-8, Phenylurea 64-47-1, Physostigmine sulfate 64-55-1, Mebutamat
64-77-7, Tolbutamide 65-19-0 65-28-1 65-29-2 65-45-2, Salicylamide
65-49-6, PAS 65-85-0, Benzoic acid, biological studies 65-86-1, Orotic
acid 66-22-8, Uracil, biological studies 66-76-2 67-45-8, Furoxon
67-92-5, Dicycloverin hydrochloride 67-96-9 68-11-1, Thioglycolic
acid, biological studies 68-91-7 68-94-0, Hypoxanthine 69-14-7,
Trimanyl 69-65-8, Mannit 69-72-7, Salicylic acid, biological studies
69-79-4, Maltose 69-89-6, Xanthine 69-96-5 70-30-4 71-82-9
72-14-0, Sulfathiazol 72-54-8 72-80-0, Sterosan 76-09-5 76-20-0
76-57-3 76-61-9, Thymolblue 76-62-0 76-78-8 76-83-5 76-84-6,
Triphenylcarbinol 77-03-2, Sedulon 77-04-3, 3,3-Diethyl-2,4-
dioxotetrahydropyridine 77-09-8 77-21-4, Doriden 77-41-8 77-67-8
78-11-5 78-28-4 79-55-0 79-93-6, Phenaglycodol 80-49-9 80-69-3,
Tartronic acid 80-71-7 80-97-7 81-07-2, Saccharine 81-23-2,
Dehydrocholic acid 81-54-9 81-60-7 81-61-8 81-89-0 81-92-5,
Egmol 82-66-6, Diphenadione 82-71-3 83-12-5, 2-Phenyl-1,3-indandione
83-34-1, 3-Methylindole 83-44-3, Desoxycholic acid 83-46-5 83-48-7
83-63-6, Pellidol 83-70-5, Vitamin K5 83-73-8, Diiodohydroxyquinoline
83-75-0, Euquinine 83-87-4 83-88-5, Lactoflavine, biological studies
84-02-6 84-11-7, Phenanthraquinone 84-12-8, Entobex 84-88-8,
8-Hydroxyquinoline-5-sulfonic acid 85-01-8, Phenanthrene, biological
studies 86-30-6, N-Nitrosodiphenylamine 86-34-0 86-48-6,
1-Hydroxy-2-naphthoic acid 86-55-5, 1-Naphthalenecarboxylic acid
86-73-7, Fluorene 86-78-2 86-86-2, 1-Naphthylacetamide 87-41-2,
Phthalide 87-51-4, 1H-Indole-3-acetic acid, biological studies 87-52-5
87-66-1, Pyrogallol 87-79-6, Sorbose 87-89-8, Inosite 88-20-0
88-67-5 88-96-0, Phthalamide 88-99-3, 1,2-Benzenedicarboxylic acid,
biological studies 89-05-4, Pyromellitic acid 89-25-8 89-51-0,
Homophthalic acid 89-68-9, Chlorthymol 89-86-1 90-01-7, Saligenin
90-05-1 90-15-3, 1-Naphthalenol 90-30-2 90-33-5,
4-Methyl-umbelliferone 90-43-7, [1,1'-Biphenyl]-2-ol 90-46-0,
Xanthydrol 90-47-1, Xanthone 90-50-6, 3,4,5-Trimethoxycinnamic acid
90-64-2, Amygdalic acid 90-82-4 90-85-7, Benzylephedrine 90-94-8
91-01-0, Diphenylcarbinol 91-10-1 91-15-6, 1,2-Benzenedicarbonitrile
91-20-3, Naphthalene, biological studies 91-40-7 91-56-5, Isatin
91-57-6 91-60-1, 2-Naphthalenethiol 91-80-5, Methapyrilene 91-89-4,
Paracotoin 92-24-0, Naphthacene 92-44-4, 2,3-Naphthalenediol
92-62-6, Proflavine 92-69-3, [1,1'-Biphenyl]-4-ol 92-71-7, PPO
92-77-3 92-88-6, [1,1'-Biphenyl]-4,4'-diol 93-04-9 93-09-4,
2-Naphthalenecarboxylic acid 93-14-1 93-18-5, Nerolin II 93-35-6,
Umbelliferon 93-42-5, Thionalid 93-44-7 93-56-1, Phenylethylene
glycol 93-60-7 94-13-3, Propyl-4-hydroxy benzoate 94-14-4, Cycloform
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic
cross-reaction mechanism in relation to)

IT 94-15-5, Larocaine 94-18-8, Nipabenzyl 94-19-9, Globucid 94-62-2,
Piperine 94-67-7 95-04-5, Ectylurea 95-15-8, Thionaphthene 95-20-5
95-48-7, biological studies 95-63-6, Pseudocumene 95-80-7 95-87-4
95-93-2, Durol 96-91-3 97-05-2, Sulfosalicylic acid 97-24-5
97-65-4, biological studies 98-71-5 98-79-3, 5-Oxo-L-proline
98-92-0, 3-Pyridinecarboxamide 98-96-4, Pyrazinamide 99-06-9,
biological studies 99-14-9, Tricarballylic acid 99-20-7 99-26-3,
Dermatol 99-50-3, 3,4-Dihydroxybenzoic acid 99-53-6,
2-Methyl-4-nitrophenol 99-76-3, Nipagin 99-93-4 99-96-7, biological
studies 100-88-9 100-97-0, biological studies 101-31-5 101-38-2
101-99-5, Phenylurethane 102-08-9, Diphenylthiourea 102-98-7,

Phenylmercuryborate 103-01-5, N-Phenylglycine 103-03-7, 1-Phenylsemicarbazide 103-16-2, Monobenzon 103-41-3, Cinnamic acid benzylester 103-82-2, Phenylacetic acid, biological studies 103-85-5, Phenylthiourea 103-90-2 104-15-4, biological studies 105-67-9 106-44-5, biological studies 106-48-9 106-49-0, p-Toluidine, biological studies 106-50-3, 1,4-Benzenediamine, biological studies 107-97-1, Sarcosine 108-39-4, m-Cresole, biological studies 108-45-2, 1,3-Benzenediamine, biological studies 108-73-6, Phloroglucine 109-57-9, Thiosinamine 110-44-1 110-85-0, Piperazine, biological studies 111-20-6, Decanedioic acid, biological studies 112-47-0, 1,10-Decanediol 112-72-1, Tetradecanol 112-86-7 **113-22-4**, Styptanon 113-52-0 113-59-7, Taractan 114-80-7 114-86-3, Phenformin 115-24-2, Sulfonal 115-33-3 115-77-5, biological studies 116-38-1, Edrophonium-chloride 117-10-2, Istizin 117-34-0, Diphenylacetic acid 117-89-5, Trifluoperazin 118-41-2, 3,4,5-Trimethoxybenzoic acid, biological studies 118-55-8, Salol 118-57-0, Salophen 118-76-3 118-79-6 118-82-1 119-39-1, 1(2H)-Phthalazinone 119-58-4 119-90-4 119-91-5, 2,2'-Biquinoline 119-93-7 120-14-9, Veratrumaldehyde 120-18-3, 2-Naphthalenesulfonic acid 120-22-9, p-Nitrosodiethylaniline 120-46-7, Dibenzoylmethane 120-57-0, Heliotropine 120-72-9, 1H-Indole, biological studies 120-78-5 120-97-8 121-57-3 121-82-4, Hexogen 122-25-8 122-39-4, Diphenylamine, biological studies 122-59-8 122-66-7 122-69-0, Styracin 123-31-9, Hydroquinone, biological studies 123-47-7, Endoiodin 124-43-6, Ortizon 124-76-5, Isoborneol 124-87-8 125-13-3 125-33-7, Primidone 125-46-2 125-51-9 125-52-0, Oxyphencyclimine hydrochloride 125-64-4, Noludar 125-85-9, Parpanit 125-99-5, Pathilon 126-02-3, Cycrimine hydrochloride 126-27-2, Oxethazaine 126-52-3, Ethinamate 126-81-8, Dimedon 127-48-0, Tridione 128-13-2 129-00-0, Pyrene, biological studies 129-20-4, Tanderil 129-77-1 130-15-4, 1,4-Naphthalenedione 130-61-0 131-01-1, Deserpidine 131-28-2 131-49-7, Angiografin 131-73-7 132-18-3 132-53-6 132-86-5, 1,3-Naphthalenediol 133-10-8 133-32-4, 1H-Indole-3-butanoic acid 133-67-5, Trichlormethiazide 134-31-6 134-71-4, Ephetonin 135-02-4 135-19-3, 2-Naphthalenol, biological studies 135-31-9 135-44-4 135-88-6 136-38-9 136-40-3, Phenazopyridine hydrochloride 136-47-0 136-72-1, Piperic acid 136-77-6, 4-Hexylresorcine 136-82-3, Metycaine 137-26-8, Thiram 137-58-6, Xylocaine 137-86-0 138-14-7, Desferal 138-41-0, Benzoic acid-p-sulfamide 139-33-3, Komplexon III 139-62-8 140-22-7, Diphenylcarbazide 140-64-7 141-82-2, Malonic acid, biological studies 142-63-2, Piperazine hexahydrate 143-66-8 143-67-9, Vinblastine sulfate 143-92-0, Tropenzilium bromide 144-75-2, Diasone 146-22-5, Mogadon 146-48-5, Quebrachin 146-56-5 147-24-0, Diphenhydramine hydrochloride 147-93-3, Thiosalicylic acid 147-94-4 148-24-3, 8-Quinolinol, biological studies 148-72-1, Pilocarpine nitrate 148-79-8, Thiabendazole 149-30-4, 2-Mercaptobenzthiazole 149-91-7, Gallic acid, biological studies 150-69-6 150-76-5, Hydroquinonemonomethyl ether 150-78-7 151-83-7, Methohexital 152-02-3 152-11-4, Isoptin hydrochloride 152-72-7, Sintrom 154-69-8, Pyribenzamine hydrochloride 155-09-9 155-41-9 191-48-0, Diacenaphtho[1,2-j:1',2'-l]fluoranthene 206-44-0, Fluoranthene 217-59-4, Triphenylene 288-32-4, Imidazole, biological studies 288-47-1, Thiazole 298-81-7, Meladinine **298-96-4**, Triphenyl **tetrazolium** chloride 299-39-8 299-42-3 300-48-1 302-70-5, Mitomen 302-79-4, Tretinoin 303-25-3, Cyclizine hydrochloride 303-69-5, Dominal 304-84-7, Etamivan 306-03-6 306-07-0 306-19-4 306-21-8, Paredrine hydrobromide 314-03-4 315-80-0, Dibenzepin hydrochloride 317-34-0 318-98-9, Propranolol hydrochloride 319-89-1, Tetrahydroxyquinone 320-77-4 331-39-5 339-43-5 341-70-8 350-12-9, Sulbentin 357-66-4, Spirilene 360-68-9, Koprosterin 364-62-5, Metoclopramide 365-26-4 382-67-2 389-08-2, Nalidixic acid 390-64-7, Segontin 396-01-0 434-13-9 435-97-2, Marcoumar 439-14-5, Valium 443-48-1, Metronidazole 447-05-2, Pyridoxine phosphate 452-86-8 456-59-7, Cyclandelate 458-24-2, Fenfluramine 466-06-8, Proscillaridin 466-09-1, Uzarigenin 471-47-6, Oxamidic acid 475-25-2, Hematine 477-93-0, Dimethoxanate 479-18-5, Isophyllen

479-27-6, 1,8-Naphthalenediamine 479-92-5 480-68-2 481-06-1,
Santonin 481-85-6, 2-Methyl-1,4-naphthohydroquinone 482-05-3, Diphenic
acid
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic
cross-reaction mechanism in relation to)

IT 482-68-8, Sarpagan-10,17-diol 482-74-6 483-84-1, Flavianic acid
484-11-7, Neocuproin 484-23-1, Nepresol 485-34-7, Novatophan
486-25-9, Fluorenone 486-67-9, Mersalyl acid 486-79-3, Dipyrocetyl
487-53-6, Oxyprocaine 488-41-5 489-98-5, Picramide 490-79-9,
2,5-Dihydroxybenzoic acid 490-91-5, Thymoquinone 490-98-2, Salicaine
492-22-8, 9H-Thioxanthen-9-one 492-41-1 492-70-6 493-52-7, Methyl
Red 493-80-1, Luvistin 495-69-2, Hippuric acid 497-25-6,
2-Oxazolidinone 497-59-6, Meconic acid 497-75-6 498-23-7, Citraconic
acid 498-24-8, Mesaconic acid 500-38-9 500-89-0, Thiambutosin
501-52-0, Benzenepropanoic acid 501-65-5, Tolan 501-81-5,
3-Pyridylacetic acid 504-15-4, Orcin 505-48-6, Suberic acid
505-54-4, Hexadecanedioic acid 510-74-7, Spiramide 511-13-7, Detigon
511-46-6, Keithon 512-69-6, Raffinose 515-64-0, Elkosin 515-96-8,
Semioxamazide 516-95-0 517-28-2, Hematoxyline 519-05-1, Opianic acid
519-32-4 519-37-9 519-41-5 519-73-3, Triphenyl methane 520-07-0
520-26-3, Hesperidine 521-74-4 522-12-3 522-23-6, Metofenazate
difumarate 522-51-0 522-66-7, Hydroquinine 523-21-7 523-87-5
524-42-5, 1,2-Naphthoquinone 525-48-4 526-75-0 527-06-0,
D-glycero-D-galacto-Heptitol 528-21-2, Gallacetophenone 530-78-9
532-03-6, Methocarbamol 532-54-7 532-76-3, Hexylcaine hydrochloride
533-06-2 533-10-8 533-63-1, Iodival 533-73-3, 1,2,4-Benzenetriol
535-83-1 536-21-0, Norfenefrine 536-33-4, Iridozin 537-12-2
537-26-8 537-45-1 538-02-3, Cyclopentamine hydrochloride 538-24-9,
Trilaurin 538-32-9 538-56-7 538-58-9 538-62-5, Diphenylcarbazone
539-08-2 539-09-3, Elbon 539-21-9, Iversal 539-47-9 543-15-7,
Heptaminol hydrochloride 547-57-9 547-58-0, Methylorange 548-00-5,
Tromexan 548-35-6 548-57-2, Miracil D 548-73-2, Dehydrobenzperidol
550-70-9, Triprolidine hydrochloride 550-74-3 552-22-7, Thymoliodide
552-46-5, α-Naphthylamine hydrochloride 552-94-3, Diplosal
553-06-0 553-30-0, Proflavinhemisulfate 554-24-5, Phenobutiodil
554-57-4, Methazolamide 555-28-2, Eucaine hydrochloride 555-30-6,
Methyldopa 555-68-0, m-Nitrocinnamic acid 556-50-3 561-20-6
562-09-4, Systral 562-10-7, Doxylamine 569-51-7, Hemimellitic acid
569-59-5 569-61-9, Pararosaniline 571-60-8, 1,4-Naphthalenediol
575-44-0, 1,6-Naphthalenediol 576-68-1, Mannomustin 578-19-8,
Diaspirin 578-94-9 579-10-2, Exalgin 579-23-7, Cyclovalone
579-75-9, Salicylic acid methylether 580-16-5, 6-Quinolinol 581-43-1,
2,6-Naphthalenediol 582-17-2, 2,7-Naphthalenediol 588-59-0, Stilbene
590-63-6, Urecholine chloride 594-14-9 599-04-2 603-00-9 603-50-9,
Dulcolax 603-52-1, Diphenylurethane 603-63-4, Hypnal 603-64-5
604-75-1, Oxazepam 606-90-6, Piprinhydrinate 607-00-1 608-59-3,
Gluconate 608-66-2, Melampyrit 611-36-9, 4-Quinolinol 611-71-2
612-41-9, o-Nitrocinnamic acid 612-52-2 613-03-6 613-12-7
613-31-0, Dihydroanthracene 614-33-5 620-40-6, Tribenzylamine
620-99-5, Holocaine hydrochloride 621-06-7, Phenylacetanilide 621-08-9
621-37-4 621-71-6, Tricaprin 621-82-9, Cinnamic acid, biological
studies 622-03-7, Diphenylthiocarbazide 622-64-0 626-64-2,
4-Pyridinol 632-25-7, o-Sulfobenzoic acid 635-41-6, Trimetozin
637-56-9, p-Phenetidine hydrochloride 637-58-1, Tronothane hydrochloride
644-26-8, Stovain 644-62-2 655-05-0, Thozalinone 673-31-4,
Phenprobamate 693-23-2, Decamethylenedicarboxylic acid 696-62-8
697-91-6 699-06-9 712-48-1 721-19-7, Methastyridone 729-99-7
738-70-5, Trimethoprim 739-71-9, Trimipramine 742-20-1,
Cyclopenthiazide 749-02-0 749-13-3, Trifluperidol 751-94-0
826-39-1, Mecamylamine hydrochloride 830-81-9, 1-Naphthylacetate
840-65-3 841-32-7, Diphenylpropylacetic acid 846-49-1, Lorazepam
846-50-4, Temazepam 848-75-9, Lormetazepam 852-19-7, Sulfapyrazole
853-34-9, Ketophenyl butazone 868-18-8 877-43-0, 2,6-Dimethylquinoline
890-98-2, Mandelic acidbenzylester 891-33-8, Tutocaine 894-71-3,
Nortriptyline hydrochloride 897-15-4, Dosulepin hydrochloride

909-39-7, Insidon 910-86-1 912-60-7, Narcotine.hydrochloride
933-67-5, 7-Methylindole 938-25-0, 1,2-Naphthalenediamine 943-17-9
943-17-9, Effortil 953-26-4 956-48-9 957-51-7, Diphenamid
958-93-0, Thenyldiamine hydrochloride 963-39-3, Demoxepam 964-52-3
965-52-6, Nifuroxazide 967-80-6 969-33-5, Cyproheptadine hydrochloride
977-79-7 982-43-4 985-13-7 1007-33-6 1011-54-7, trans-2-Methoxy
cinnamic acid 1011-92-3, α-Cyano-cinnamic acid 1015-89-0,
6(5H)-Phenanthridinone 1021-11-0 1059-28-5, Tussukal 1070-95-7,
Guanoctine hydrochloride 1077-28-7, DL-Thioctic acid 1079-71-6,
Octahydroanthracene 1082-57-1, Rhinogutt 1083-57-4 1088-92-2
1094-08-2, Profenamine hydrochloride 1098-60-8 1115-70-4, Metformin
hydrochloride 1142-42-3 1145-36-4, Felogen 1146-95-8, Gilutensin
hydrochloride 1147-56-4, 1-(2-Thiazolylazo)-2-naphthol 1151-11-7,
Solu-Biloptin 1155-49-3, Falicain 1156-19-0, Tolazamide 1172-18-5,
Flurazepam dihydrochloride 1173-88-2, Stapenor 1176-03-0, Psicaine
1176-08-5, Phenyltoloxamine citrate 1179-69-7, Torecan 1197-18-8,
Tranexamic acid 1198-55-6 1199-77-5, α-Methyl-cinnamic acid
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic
cross-reaction mechanism in relation to)

IT 1211-28-5, Katovit 1212-72-2, Mephen-termine sulfate 1215-83-4,
Silomat 1218-35-5 1225-55-4 1228-19-9, Glypinamide 1229-29-4,
Doxepin hydrochloride 1229-69-2 1240-15-9, Propiomazine hydrochloride
1248-42-6 1256-01-5, Pasaden 1323-64-4 1391-57-7, Filmaron
1400-62-0, Orcein 1407-14-3, Helenine 1421-86-9, Strychnine
hydrochloride 1480-19-9, Fluanisone 1491-41-4, Maretin 1508-27-6
1508-75-4 1508-76-5, Procyclidine hydrochloride 1582-09-8,
Trifluraline 1596-70-9 1622-62-4, Flunitrazepam 1622-79-3
1639-60-7 1641-74-3, Nicametate citrate 1642-54-2 1674-48-2
1722-62-9 1740-22-3, Surexin 1764-85-8, Epithiazide 1786-81-8,
Prilocaine hydrochloride 1837-57-6, Rivanol 1841-19-6, Fluspirilene
1847-63-8, Nafoxidine hydrochloride 1867-66-9, Ketamine hydrochloride
1893-33-0 1944-12-3, Fenoterol hydrobromide 1975-50-4,
2-Methyl-3-nitro-benzoic acid 2002-29-1 2043-43-8, Lactamide
2053-26-1, Papaverine sulfate 2062-78-4 2081-65-4 2135-17-3,
Flumethason 2139-47-1 2181-22-8 2192-20-3 2210-63-1,
Monophenylbutazone 2217-44-9 2218-94-2, Nitron 2243-62-1,
1,5-Naphthalenediamine 2259-96-3, Cyclothiazide 2295-31-0,
2,4-Thiazolidinedione 2307-81-5, Quiloflex 2313-87-3, Ethoxazene
hydrochloride 2315-02-8 2321-07-5 2324-94-9 2347-80-0 2348-17-6
2350-32-5, Stadacaine 2398-96-1, Tonoftal 2435-53-2 2444-46-4
2447-57-6, Fanasil 2448-68-2 2451-01-6, Terpinhydrate 2465-59-0,
Oxypurinol 2525-09-9 2530-97-4 2572-61-4 2574-78-9 2606-93-1
2608-24-4 2622-26-6, Periciazine 2691-46-5, Spasmo-Paparid
2709-56-0, Flupenthixol 2773-92-4, Quotane hydrochloride 2784-55-6
2810-69-7 2825-60-7, Formocortal 2870-71-5, Tropin 2898-12-6,
Medazepam 2955-38-6, Prazepam 2961-04-8 2987-16-8 3058-01-3
3069-07-6, Tetraacetyl hydrazine 3093-35-4, Halcinonide 3112-31-0,
1H-Pyrazole-3,5-dicarboxylic acid 3115-05-7 3254-89-5, Diphenidol
hydrochloride 3269-83-8 3339-11-5, Tolpropamine hydrochloride
3403-42-7, Methopromazine maleate 3413-58-9, Optochin hydrochloride
3416-26-0, Lidoflazine 3453-83-6 3458-28-4, D(+)Mannose 3459-20-9,
Redul 3546-03-0 3546-41-6 3605-01-4, Piribedil 3614-30-0
3614-69-5 3615-41-6, Rhamnose 3682-32-4, 2-Nitroso-1-naphthol-4-
sulfonic acid 3685-84-5, Meclophenoxate hydrochloride 3688-85-5,
Diapamide 3689-50-7, Oxomemazin 3717-88-2 3731-59-7 3735-45-3,
Monzal 3735-90-8, Fencarbamide 3759-07-7 3772-76-7, Methofadin
3811-56-1, Surfen 3818-88-0, Tricyclamol chloride 3829-86-5
3871-82-7, Methylperidol hydrochloride 3937-56-2, 1,9-Nonanediol
3963-81-3, Trigemin 4003-94-5, 4-Nitrostilbene 4044-65-9,
1,4-Phenylenediisothiocyanate 4247-16-9, Methylglutamine 4330-99-8
4394-00-7 4427-56-9, Isothymol 4546-48-9 4551-59-1 4582-18-7,
Endomid 4682-36-4 4724-59-8 4779-94-6, Novadral hydrochloride
4839-46-7, 3,3-Dimethylglutaric acid 4991-65-5, Tioxolon 5034-76-4,
Indoxole 5041-09-8, Isobutylamine hydrochloride 5076-82-4, Sarcosine
anhydride 5144-52-5 5255-68-5 5322-53-2, Oxiperomide 5370-01-4

5416-45-5, Phenyldiphenylcarbamate 5428-54-6, 2-Methyl-5-nitrophenol
5437-38-7, 3-Methyl-2-nitro-benzoic acid 5449-84-3 5536-17-4
5579-13-5 5585-60-4 5588-29-4, Fenmetramide 5588-31-8, Imidoline
hydrochloride 5591-29-7, Etafedrine hydrochloride 5591-45-7,
Thiothixene 5667-46-9, Dioxyline phosphate 5716-20-1, Vasculat
5870-29-1, Cyclopentolate hydrochloride 5874-97-5 5875-06-9
5936-29-8 5969-39-1 5987-82-6, Novesin 6027-28-7, Hostacaine
6028-35-9 6038-78-4 6056-11-7, Selvigon 6114-26-7, Veritol sulfate
6138-47-2 6153-33-9 6159-56-4 6164-87-0, Ronicol 6190-43-8,
Helmitol 6192-92-3 6202-05-7, Cyclomethycaine sulfate 6202-23-9,
Cyclobenzaprine hydrochloride 6217-24-9 6284-40-8, Meglumin
6411-75-2 6452-71-7 6493-05-6, 3,7-Dimethyl-1-(5-oxohexyl)xanthine
6506-37-2, Nimorazol 6521-30-8 6536-18-1 6556-11-2, Inositol
nicotinate 6575-24-2 6673-35-4, Practolol 6700-56-7, Ethoheptazine
citrate 6724-53-4, Perhexiline maleate 7008-15-3 7009-43-0
7021-09-2, Methoxy-phenylacetic acid 7085-55-4, Troxerutin 7125-73-7,
Flumetramide 7195-27-9, Mefrusid 7199-29-3, Cyheptamide 7210-92-6,
Tolycaine hydrochloride 7242-04-8, Pentaacetyl gitoxin 7270-12-4,
Resotren 7297-25-8 7413-36-7, Nifenalol 7414-95-1 7491-74-9,
Piracetam 7517-19-3, L-Leucine methyl ester hydrochloride 7601-55-0,
Metubine iodide 8002-89-9 8006-08-4, Ergotoxinine 8015-17-6,
Metrotonin 8015-18-7, Veramon 8064-60-6, Primulin 9001-22-3, Emulsin
9002-92-0 9004-53-9, Dextrin 9005-79-2, Glycogen, biological studies
9005-80-5, Inulin 10040-45-6 10176-39-3 10238-21-8 10347-81-6
10402-53-6 10405-02-4 10539-19-2, Eupaverin 10563-70-9, Melitracen
hydrochloride 10592-03-7, Vincamine hydrochloride 11014-59-8,
Lanatoside 11024-24-1 12002-15-2, Sapamine 12041-92-8,
Hexyltheobromine 12694-25-6, Bi-9H-fluorene 13055-82-8, Reproterol
hydrochloride 13422-16-7, Triflocin 13472-79-2 13492-01-8
13523-86-9, Pindolol 13636-10-7 13636-18-5 13665-88-8, Mopidamol
13900-17-9
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic
cross-reaction mechanism in relation to)

IT 13977-28-1 14198-59-5 14222-60-7, Ektebin 14255-87-9, Parbendazole
14293-44-8 14516-56-4 14538-56-8, Piperazine phosphate 14543-76-1
14698-29-4, Oxolinic acid 14759-06-9 15307-79-6, Voltaren
15351-13-0, Nicofuranose 15402-76-3 15537-73-2, Silubin 15585-38-3
15676-16-1, Sulpiride 15687-27-1, Ibuprofen 15825-70-4 15876-67-2
16110-98-8, Phenyl maleic acid 16662-46-7, Gallopamil hydrochloride
16773-42-5, Ornidazole 16994-56-2 17088-72-1 17226-75-4 17273-86-8
17297-82-4 17407-37-3, DL-α-Tocopherol succinate 17509-71-6
17560-51-9, Metolazone 17692-39-6 17892-25-0 18174-58-8 18559-94-9
18760-80-0, Methylephedrine hydrochloride 18869-73-3, Triacetyl
diphenolisatin 19188-90-0 19237-84-4, Prazosin hydrochloride
19311-91-2 19387-91-8, Tinidazole 19562-30-2 19794-93-5, Trazodone
20153-98-4 20231-81-6, Uzarin 20277-92-3, N,N-Diphenyl-guanidine
20423-87-4 20432-64-8, Iprindole hydrochloride 20455-68-9,
Dibenzylamine hydrochloride 20788-07-2, Terenol 20833-93-6
21361-95-5 21498-08-8 21535-47-7, Mianserine hydrochloride
21721-92-6 21738-42-1 21829-25-4, Nifedipine 22059-60-5,
Disopyramide phosphate 22071-15-4, Ketoprofen 22089-22-1, Trofosfamide
22204-53-1, Naproxen 22232-55-9, Modatrop 22254-24-6,
Ipratropiumbromide 22494-42-4, Diflunisal 22664-55-7, DL-Metipranolol
22760-18-5 22832-87-7 22888-70-6 23031-32-5, Terbutalinsulfate
23092-17-3, Halazepam 23111-34-4, Feclobuzone 23142-01-0 23239-51-2
23288-49-5, Probucol 23307-02-0 23327-57-3, Nefopam hydrochloride
23488-38-2 23607-71-8 23694-81-7, Mepindolol 23873-81-6 23983-43-9
24168-96-5 24169-02-6 24324-17-2, 9-Fluorenyl-methanol 24526-64-5,
Nomifensin 24561-10-2, Piperocaine hydrochloride 24600-36-0, Fominoben
hydrochloride 24815-24-5 25046-79-1, Glisoxepid 25167-82-2
25167-84-4 25498-47-9, Saiodin 25717-80-0 25812-30-0, Gemfibrozil
25953-17-7 25990-60-7, DL-Xylose 26020-55-3 26309-95-5,
Pivampicillin hydrochloride 26598-44-7 26718-25-2 26864-56-2,
Penfluridol 26921-17-5, Timolol-maleate 26983-52-8, Diphenol
27479-32-9 27848-84-6 28346-70-5, Naphthalenediol 28738-34-3

29094-61-9, Glipizide 29110-48-3 29868-97-1 30440-92-7 30900-94-8
30919-08-5 31329-57-4, Naftidrofuryl 31431-39-7, Mebendazole
31566-31-1, Glycerin monostearate 31793-07-4, Pirprofen 31842-01-0,
Indoprofen 31901-98-1, Naphthalenetetracarboxylic acid 32672-69-8
32780-64-6, Labetalol hydrochloride 32972-46-6 33125-97-2, Etomidate
33342-05-1 33396-37-1 33401-94-4, Pyrantel-tartrate 33402-03-8
33996-33-7, Oxaceprol 34183-22-7, Propafenone hydrochloride
34552-84-6, Isoxicam 34661-75-1 35306-33-3 35412-64-7 35604-67-2,
Viloxazine hydrochloride 36236-67-6, Meclizine hydrochloride
36282-47-0, Tramadol hydrochloride 36322-90-4, Piroxicam 36637-19-1,
Etidocaine hydrochloride 37275-48-2, Dipyridyl 37887-33-5
38096-29-6, Pyridinediamine 38194-50-2, Sulindac 38304-91-5, Minoxidil
38866-78-3 39379-48-1, Reten 39461-53-5, Pyrenedione 39562-70-4
39568-70-2 40180-04-9 40507-80-0 41100-52-1, Memantine hydrochloride
41340-25-4, Etodolac 41451-91-6, Erythromycine 41587-33-1
41767-29-7, Fluocortinbutyl ester 41838-38-4 41847-77-2 41960-46-7
42200-33-9, Nadolol 43218-56-0 49721-50-8 49746-00-1, Twiston
50322-92-4 50679-08-8 50832-74-1, Nifurprazine hydrochloride
50838-36-3 50926-65-3, Novalgin-quinine 51481-61-9 51703-77-6
51931-66-9 51940-44-4, Pipemidic acid 51996-59-9 52432-72-1,
Oxeladin citrate 52441-07-3, Parsol 52468-60-7 53179-11-6,
Loperamide 53623-34-0 53663-23-3 53783-83-8, Tromantadine
53859-10-2 53885-35-1, Ticlopidine hydrochloride 54024-22-5
54504-70-0 54750-10-6, Isolevin 54767-75-8, Suloctidil 54812-66-7
54965-24-1, Tamoxifen citrate 55031-26-0, Iodoeosine 55268-74-1,
Praziquantel 55327-22-5 56050-03-4, Mecloxamine citrate 56392-17-7,
Metoprolol tartrate 57109-90-7 57808-66-9 58934-46-6, Lorcainide
hydrochloride 59831-65-1, Halopemide 59954-01-7 60525-15-7
60539-09-5 60607-34-3 61169-36-6 61229-67-2, Bromocresol red
63250-48-6, Piprozoline 64019-93-8 65271-80-9 65277-42-1,
Ketoconazole 65431-33-6, Trypaflavine 65923-65-1 66894-06-2
69494-65-1, Migraenin 72762-00-6, 2-Pyridinol 73548-65-9, Veraethyl
74217-46-2 74347-31-2 75507-68-5 77614-18-7 78361-94-1,
Naphthoquinoline 81098-57-9 83943-60-6 98578-19-9 104700-83-6
109893-47-2 139352-30-0, Pergalen 139369-53-2 139369-54-3
139369-55-4 139369-56-5 139369-57-6 139369-58-7,
2H-1-Benzopyran-3,3,4,4,5,7-hexol 139369-59-8 139369-60-1
139369-61-2 139369-62-3 139369-64-5 139369-66-7 139369-67-8
139369-68-9 139369-70-3 139369-71-4 139411-97-5
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic
cross-reaction mechanism in relation to)

IT 139412-02-5 139412-03-6 139412-04-7 139465-28-4, Dipa-Vit B 15
139465-72-8, Nipagin T 139466-02-7, Novanal 139466-06-1, Phenidol
139556-82-4 139984-92-2
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic
cross-reaction mechanism in relation to)

IT 50-33-9, Butazolidine, biological studies 50-41-9, Clomiphene citrate
50-48-6, Amitriptylin 50-63-5, Chloroquin diphosphate 50-71-5, Alloxan
50-78-2, Acetyl salicylic acid 50-85-1, m-Cresotinic acid 51-17-2,
Benzimidazole 51-35-4, Hydroxyproline 51-55-8, Atropine, biological
studies 51-66-1 51-84-3, biological studies 52-90-4, Cysteine,
biological studies 54-31-9, Furosemide 54-84-2 54-95-5, Cardiazole
55-56-1, Chlorhexidine 55-98-1, Busulphan 56-40-6, Glycine, biological
studies 56-41-7, Alanine, biological studies 56-45-1, Serine,
biological studies 56-55-3, Benzanthracene 56-72-4, Coumafos
56-75-7, Chloramphenicol 56-85-9, Glutamine, biological studies
56-87-1, L-Lysine, biological studies 56-89-3, Cystine, biological
studies 57-37-4, Benactyzine.hydrochloride 57-67-0, Sulfaguanidine
57-68-1, Sulfamethazine 57-92-1, Streptomycin, biological studies
58-08-2, biological studies 58-15-1 58-33-3, Atosil 58-61-7,
Adenosine, biological studies 58-94-6, Chlorthiazide 59-42-7
59-49-4, 2(3H)-Benzoxazolone 60-18-4, L-Tyrosine, biological studies
60-27-5 60-32-2 60-54-8 60-80-0, Antipyrin 61-12-1 61-33-6,
Penicillin G, biological studies 61-72-3, Cloxacillin 61-75-6,

Bretyliumtosylate 61-90-5, Leucine, biological studies 61-94-9
61-96-1, Corbasil 63-68-3, Methionine, biological studies 63-91-2,
Phenylalanine, biological studies 64-77-7, Artosin 64-86-8, Colchicine
64-95-9, Adiphenin 65-45-2, Salicylic acid amide 65-82-7,
N-Acetylmethionine 66-81-9 67-03-8, Aneurine hydrochloride 67-52-7,
2,4,6(1H,3H,5H)-Pyrimidinetrione 68-35-9, Sulfadiazin 68-41-7,
D-Cycloserine 69-09-0, Chlorpromazine hydrochloride 69-27-2 69-53-4,
Ampicillin 70-47-3, Asparagine, biological studies 71-00-1, Histidine,
biological studies 72-18-4, Valine, biological studies 72-19-5,
Threonine, biological studies 72-48-0, Alizarin 73-22-3, Tryptophane,
biological studies 73-24-5, Adenine, biological studies 73-32-5,
Isoleucine, biological studies 73-48-3, Benzylrodiuran 74-79-3,
L-Arginine, biological studies 76-22-2 76-29-9 76-60-8,
Bromcresolgreen 76-65-3, Amolanone 77-02-1, Allonal 77-36-1
77-46-3, Acedapsone 77-65-6, Adalin 77-91-8 79-05-0, Propanamide
79-57-2, Oxytetracycline 80-03-5 80-05-7, biological studies
80-32-0, Vetisulid 80-77-3, Chlormezanone 80-97-7 81-61-8 81-64-1,
Quinizarine 82-05-3, Benzanthrone 82-45-1, 1-Amino-anthraquinone
82-54-2, Cotarnine 82-86-0, 1,2-Acenaphthylenedione 82-93-9 83-32-9,
Acenaphthene 83-40-9, o-Cresotinic acid 84-65-1, Anthraquinone
85-18-7 85-73-4, Taleudron 86-42-0 86-54-4 86-74-8, Carbazole
87-08-1 87-32-1, N-Acetyl-DL-tryptophan 87-88-7 88-21-1 89-56-5,
p-Cresotinic acid 90-64-2, Amygdalic acid 90-84-6 91-33-8 91-64-5,
2H-1-Benzopyran-2-one 93-08-3 93-10-7, Quinaldinic acid 93-18-5
93-44-7 94-09-7, Benzocaine 94-12-2 94-19-9 94-20-2,
Chlorpropamide 94-25-7, Butesine 94-41-7 95-25-0, Chlorzoxazone
95-55-6, o-Aminophenol 95-85-2 96-83-3, Iopanoic acid 97-59-6,
Allantoin 98-37-3 98-50-0, Arsanilic acid 99-32-1, Chelidonic acid
99-91-2 101-71-3 102-07-8, Carbanilide 103-12-8, Prontosil
103-32-2, Benzylaniline 103-41-3 103-84-4, N-Acetylaniline 103-89-9
103-90-2 104-06-3, Conteben 104-14-3 105-20-4, Betazole 106-34-3,
Quinhydrone 106-51-4, p-Benzoquinone, biological studies 113-92-8,
Chlorpheniramine maleate 114-83-0 115-39-9, Brom Phenol Blue
115-51-5, Ambutoniumbromide 115-68-4, Irgamid 118-10-5 118-23-0,
Ambodryl 118-75-2, Chloranil, biological studies 118-92-3,
o-Aminobenzoic acid 119-53-9, Benzoin 119-61-9, Benzophenone,
biological studies 120-32-1 120-34-3, Irgafen 121-25-5, Amprolium
122-11-2, Madribon 122-80-5 124-04-9, Hexanedioic acid, biological
studies 125-60-0, Baralgin-Amid 126-07-8 126-43-2 127-69-5,
Sulfafurazol 127-79-7, Sulfamerazine 127-81-1, Salthion 130-16-5
130-22-3 131-08-8 131-09-9 132-98-9, Isocillin 134-50-9,
9-Aminoacridine hydrochloride 134-81-6, Benzil 134-85-0 136-95-8,
2-Benzothiazolamine 137-08-6, Calcium-D-pantothenate 138-39-6,
Mafenide 139-85-5 141-82-2, Propanedioic acid, biological studies
143-37-3, Ethanimidamide 144-83-2 145-94-8, Chlorindanol 146-56-5
147-24-0, Benadryl 147-55-7, Pheneticillin 147-85-3, Proline,
biological studies 148-64-1 148-82-3, Melphalan 149-15-5, Butyn
Sulfate 149-64-4 150-13-0, p-Aminobenzoic acid 150-69-6,
p-Ethoxyphenylurea 152-47-6 153-61-7, Cefalotin 154-87-0,
Cocarboxylase 154-97-2, Contrathion 208-96-8, Acenaphthylene
218-01-9, Chrysene 243-42-5, Benzo[b]naphtho[2,3-d]furan 260-94-6,
Acridine 298-46-4, 5H-Dibenz[b,f]azepine-5-carboxamide 298-57-7,
Cinnarizine 303-81-1, Novobiocin 305-03-3, Chlorambucil 309-00-2,
Aldrin 313-67-7, Aristolochic acid 315-30-0, Allopurinol 316-41-6,
Berberinsulfate 334-48-5, Decanoic acid 346-18-9, Polythiazide
370-81-0 437-74-1 441-38-3 446-86-6, Azathioprine 464-41-5
466-49-9, Aspidospermin 467-22-1, Carbiphene hydrochloride 474-25-9
481-74-3 488-82-4, D-Arabinitol 489-49-6, Cetrarin 497-76-7, Arbutin
498-23-7, Citraconic acid 499-12-7, Aconitic acid 515-64-0,
Sulfisomidine 519-87-9, Acetyldiphenylamine 520-77-4, Ethadione
521-74-4, Broxyquinoline 526-08-9, Sulfaphenazole 529-65-7 530-43-8,
Chloromycetin palmitate 531-75-9, Aesculin 537-05-3, Acoin 537-92-8
543-24-8, N-Acetylglycine
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic
cross-reaction mechanisms in relation to)

IT 545-93-7 547-44-4 550-81-2, Amopyroquin 551-27-9, Propicillin
555-96-4 556-08-1, p-Acetaminobenzoic acid 564-25-0 569-84-6
575-36-0 577-33-3, Anthrarobin 578-66-5, 8-Aminoquinoline 581-97-5
588-68-1 590-46-5, Betaine.hydrochloride 591-07-1, N-Acetylurea
591-08-2, N-Acetylthiourea 599-79-1 599-88-2, Sulfaperin 602-09-5,
[1,1'-Binaphthalene]-2,2'-diol 606-04-2 613-78-5, Betol 616-91-1,
N-Acetyl-L-cysteine 625-53-6, N-Ethylthiourea 630-55-7, Amphotropin
636-54-4, Clopamide 637-32-1 637-49-0 651-06-9, Bayrena 653-03-2,
Butaperazine 655-35-6 671-95-4 703-80-0, 3-Acetylindole 723-46-6
729-99-7 738-66-9, Bis(4-nitrophenyl) carbodiimide 751-97-3, Reverin
768-90-1 768-94-5, Tricyclo[3.3.1.13,7]decan-1-amine 776-34-1
776-75-0, Benzoylpiperidine 795-13-1, Formyl sulfamethin 804-63-7
828-51-3 846-50-4 849-55-8, Buphenin hydrochloride 873-76-7
882-09-7 914-00-1, Methacycline 935-56-8 956-04-7 963-07-5
968-81-0, Acetohexamide 980-71-2 982-24-1, Clopenthixol 992-21-2,
Lymecycline 1050-48-2, Benzilonium bromide 1071-93-8 1072-71-5,
2,5-Dimercapto-1,3,4-thiadiazole 1098-50-6, Dansylvaline 1100-21-6,
Dansylisoleucine 1100-23-8 1101-68-4, Dansylglutamic acid 1104-36-5,
Dansylphenylalanine 1111-06-4 1126-46-1 1126-81-4 1134-47-0,
Baclofen 1143-38-0, Cignolin 1145-80-8, N-Carbobenzoxy-L-serine
1163-36-6, Allercur 1188-01-8, DL-Alanyl-glycine 1190-53-0
1215-83-4, Clobutinol hydrochloride 1218-34-4, N-Acetyl-L-tryptophan
1225-60-1, Andantol 1239-94-7, Dansylproline 1248-42-6,
Baralgin-Ketone 1249-84-9, Azacosterol.hydrochloride 1260-17-9
1263-03-2 1333-08-0 1397-89-3, Amphotericin B 1398-20-5, Baptisin
1400-61-9, Mycostatin 1401-79-2, Vionactan 1404-26-8, Polymyxin B
1404-88-2, Tyrothricin 1405-97-6, Gramicidin 1476-39-7 1477-19-6
1538-09-6 1622-61-3, Clonazepam 1642-81-5 1649-18-9, Azaperone
1684-42-0, Acranil 1798-50-1, Azacyclonol.hydrochloride 1812-30-2
1824-50-6 1824-52-8 1824-58-4 1861-40-1, Benefin 1867-58-9
1951-25-3 1986-53-4 2016-88-8, Amilorid.hydrochloride 2022-85-7
2043-38-1, Butizid 2058-52-8, Clothiapine 2109-73-1, Butacetin
2134-24-9 2138-22-9 2179-37-5 2350-32-5 2432-99-7 2465-59-0,
Alloxanthine 2483-49-0 2508-72-7 2622-30-2, Carphenazine
2667-89-2, Bisbentiamine 2751-09-9, Oleandomycin triacetate 3073-87-8,
Dimethyl-Popop 3082-75-5 3274-19-9, 1-Acetylaminoanthraquinone
3287-99-8, Benzylamine hydrochloride 3347-56-6 3483-82-7 3485-62-9
3505-38-2, Carbinoxamine maleate 3521-62-8 3533-97-9 3562-84-3
3624-96-2, Bialamicol hydrochloride 3679-64-9 3684-46-6 3686-68-8,
Cornecaine 3876-10-6 3922-90-5, Oleandomycin 4205-90-7, Clonidin
4330-99-8 4361-81-3 4388-82-3, Barbexaclon 4393-72-0 4419-39-0
4845-99-2 4942-47-6, Tricyclo[3.3.1.13,7]decane-1-acetic acid
4985-15-3, Agedal 5068-28-0 5205-82-3, Bevoniummethylsulfate
5251-34-3, Cloprednol 5355-48-6 5490-27-7 5568-90-1,
Isopromethazine.hydrochloride 5585-73-9, Butriptyline hydrochloride
5588-20-5 5591-49-1, Anilamate 5667-98-1, Baludon 5786-21-0,
Clozapin 5843-82-3 5892-41-1 6011-39-8 6469-93-8, Chlorprothixene
hydrochloride 6804-07-5, Carbadox 6933-90-0 7421-40-1 7542-37-2,
Paromomycin 7683-59-2, Aludrin 8000-95-1, Caffeine sodium-benzoate
8002-85-5 8044-71-1, Cetrimide 8059-24-3, Adermine 8068-28-8,
Colistimethate sodium 10199-89-0 10268-71-0 10323-20-3,
D(-)-Arabinose 12041-72-4, Formo-Cibazol 12246-80-9 13068-66-1
13296-94-1 13461-01-3 13539-59-8 13655-52-2, Alprenolol 13726-85-7
13838-08-9 13900-12-4 13957-27-2 14205-39-1 14286-84-1
14358-44-2 14414-68-7, Benzidine, hydrochloride 14548-46-0,
4-Benzoyl-pyridine 14976-57-9 15148-80-8, Bupranolol hydrochloride
15301-40-3 15318-45-3 15351-05-0 15686-71-2, Cefalexin 15761-39-4
16862-11-6 17039-58-6, Dansylmethionine 17321-77-6 17344-99-9
17671-51-1 17683-09-9 18010-40-7 18109-80-3 18109-81-4
18323-44-9, Sobelin 18500-45-3 19461-29-1 20191-75-7 20448-86-6
21352-09-0 21593-23-7 21898-19-1, Clenbuterol.hydrochloride
22131-79-9 22198-72-7 22199-46-8 22316-47-8, Clobazam 22457-89-2
23067-13-2 23110-15-8 23828-92-4, Ambroxol.hydrochloride 23964-57-0
25122-57-0, Clobetasone butyrate 25161-41-5, Acevaltrate 27043-22-7,
Ethoxybenzamide 27195-22-8 27323-18-8 27941-88-4 28217-22-3
28217-24-5 28805-76-7, Aminobutyric acid 28860-95-9 28981-97-7

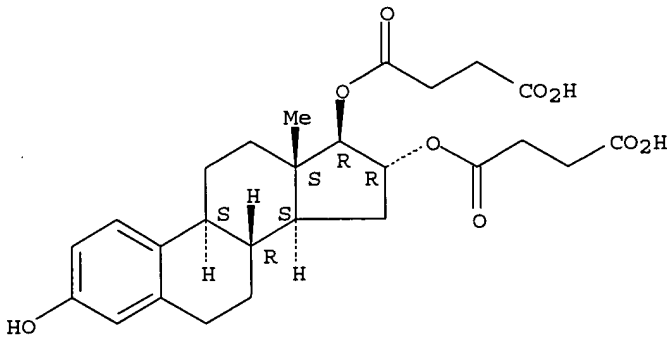
29022-11-5 29122-68-7, Atenolol 29546-59-6 30408-30-1, Nybomycin
30578-37-1
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-reaction mechanisms in relation to)

IT 30964-13-7 31135-62-3, Quinolinamine 31677-93-7 32442-99-2
32795-47-4, Alival 32862-97-8 32988-50-4, Viomycin 33386-08-2,
Buspirone hydrochloride 33817-20-8, Pivampicillin 35021-10-4
35021-12-6, Dansylserine 35021-16-0, Dansylthreonine 35026-16-5,
Dansylhydroxyproline 35661-40-6 35661-60-0 35737-10-1 35737-15-6
36413-60-2 36653-82-4, 1-Hexadecanol 37517-30-9, Acebutolol
41372-20-7 41451-91-6, Erythromycine 51264-14-3 51333-22-3
51481-61-9 51781-21-6 53164-05-9, Acemetacin 53716-49-7 54118-66-0
57470-78-7, Celiprolol hydrochloride 57775-29-8, Carazolol 62571-86-2,
Captopril 63460-06-0 63661-61-0 65571-68-8 65589-70-0 68858-20-8
71135-23-4 71989-16-7 71989-23-6 71989-28-1 71989-31-6
73724-45-5 73731-37-0 75364-47-5 81207-65-0 87980-20-9
91000-69-0 91394-66-0 92954-90-0 99103-36-3 104993-76-2
106323-02-8 116611-64-4 118477-74-0, Anthron 121343-82-6
125385-14-0, Acyclidine 139369-44-1 139369-45-2 139369-47-4
139369-49-6 139369-50-9 139369-51-0 139369-52-1 139390-98-0
139406-80-7 139411-94-2 139424-41-2 139465-03-5, Adonit M
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-reaction mechanisms in relation to)

IT **113-22-4**, Styptanon **298-96-4**, Triphenyl **tetrazolium** chloride
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-reaction mechanism in relation to)

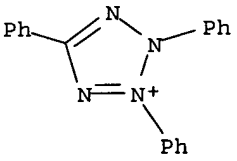
RN 113-22-4 HCAPLUS
CN Estra-1,3,5(10)-triene-3,16,17-triol, 16,17-bis(hydrogen butanedioate), disodium salt, (16α,17β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



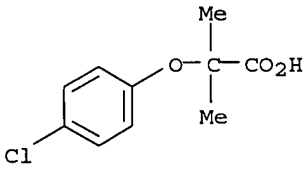
●2 Na

RN 298-96-4 HCAPLUS
CN 2H-Tetrazolium, 2,3,5-triphenyl-, chloride (8CI, 9CI) (CA INDEX NAME)



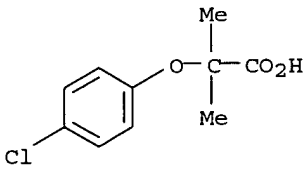
● Cl^-

IT **882-09-7**
RL: BIOL (Biological study)
(binding of, to anti-dinitrophenol monoclonal antibody, allergic cross-reaction mechanisms in relation to)
RN 882-09-7 HCAPLUS
CN Propanoic acid, 2-(4-chlorophenoxy)-2-methyl- (9CI) (CA INDEX NAME)

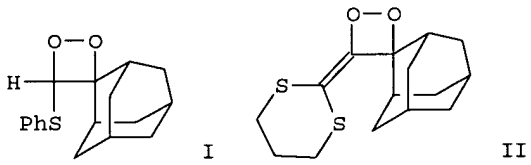


L67 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1986:17772 HCAPLUS
DN 104:17772
ED Entered STN: 24 Jan 1986
TI Phototropism of Pellia: evidence for mediation by auxin-stimulated acid efflux
AU Ellis, James G., IV; Thomas, Robert J.
CS Dep. Biol., Bates Coll., Lewiston, ME, 04240, USA
SO Journal of Plant Physiology (1985), 121(3), 259-64
CODEN: JPPHEY; ISSN: 0176-1617
DT Journal
LA English
CC 11-3 (Plant Biochemistry)
AB The shaded sides of unilaterally illuminated sporophytes of P. epiphylla (Bryophyta) became more acidic than lighted sides. This acid efflux pattern developed before the onset of curvature, and was mimicked by unilateral application of IAA or fusicoccin (1 μM). Curvature of dark-grown sporophytes was stimulated by differential surface abrasion followed by acid buffer treatment. Light-stimulated acid efflux and curvature were inhibited by treatment with 0.1 mM Na orthovanadate ; 2-(chlorophenoxy)-2-methylpropionic acid, TIBA, and pH 6.8 buffer. Apparently, auxin-stimulated acid efflux mediates phototropism of Pellia.
ST phototropism Pellia auxin acid efflux
IT Phototropism
(of Pellia, auxin-stimulated acid efflux mediation of)
IT Pellia epiphylla
(phototropism of, auxin-stimulated acid efflux mediation of)
IT Plant hormones and regulators
RL: BIOL (Biological study)
(auxins, acid efflux stimulation by, phototropism of Pellia in relation to)
IT 88-82-4 **882-09-7** 13721-39-6
RL: BIOL (Biological study)
(acid efflux inhibition by, in Pellia, phototropism in relation to)

IT 87-51-4, biological studies 20108-30-9
RL: BIOL (Biological study)
(acid efflux stimulation by, in Pellia, phototropism in relation to)
IT **882-09-7**
RL: BIOL (Biological study)
(acid efflux inhibition by, in Pellia, phototropism in relation to)
RN 882-09-7 HCAPLUS
CN Propanoic acid, 2-(4-chlorophenoxy)-2-methyl- (9CI) (CA INDEX NAME)



L67 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1982:509900 HCAPLUS
DN 97:109900
ED Entered STN: 12 May 1984
TI The synthesis of spiro[adamantane-[1,2]dioxetanes]
AU Adam, Waldemar; Encarnacion, Luis A. Arias
CS Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Fed. Rep. Ger.
SO Chemische Berichte (1982), 115(7), 2592-605
CODEN: CHBEAM; ISSN: 0009-2940
DT Journal
LA English
CC 28-4 (Heterocyclic Compounds (More Than One Hetero Atom))
OS CASREACT 97:109900
GI

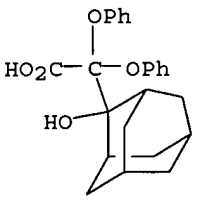


I II

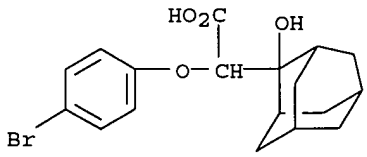
AB The spiroadamantane group stabilizes thermally labile 1,2-dioxetanes sufficiently to permit isolation. Thus, the first sulfur substituted dioxetanes I and II were prepared and characterized by low temp NMR. Photosensitized singlet oxygenation at low temperature, using either polymer-bound **Rose Bengal** or tetraphenylporphyrin as sensitizer, in CH2Cl2 of the corresponding 2-methyleneadamantanes was the method of choice for the prep of the spiro[adamantane[1,2]dioxetanes], provided that the methylene carbon bears no alkyl or Ph substituents. Hydroperoxybromination of the 2-methyleneadamantanes and subsequent dehydrobromination (K. R. Kopecky, 1975) proved unsuccessful to prepare the dioxetanes.
ST spiroadamantanedioxetane; dioxetane spiroadamantane; methyleneadamantene photochem oxygenation cyclization
IT Oxygenation
(photochem., of methyleneadamantane, spiro[adamantane-oxetane] from)
IT 122-59-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(bromination of)
IT 110-91-8, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with adamantanecarboxaldehyde)
IT 832-80-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with adamantanethione)
IT 23695-65-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with diazafluorene)
IT 67-64-1, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with dibenzyloxyacetate)
IT 39750-93-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with morpholine)
IT 68423-89-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with adamantanone)
IT 700-58-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with lithiated Me isobutyrate)
IT 547-63-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(lithiathion and condensation of, with adamantanone)
IT 42760-82-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(lithiation and condensation of, with adamantanone)
IT **82817-23-0P** 82817-30-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of, oxetane from)
IT **82817-21-8P** 82817-24-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and decarboxylation of)
IT 82817-27-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification of)
IT 20441-18-3P 33521-89-0P 34399-61-6P 67774-20-3P 70882-47-2P
82817-22-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and oxygenation of)
IT 82817-19-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and photochem. oxygenation of, spirodioxetane from)
IT 82817-20-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and thermal decarboxylation of, isopropylideneadamantane from)
IT 875-72-9P 55975-24-1P 82817-25-2P 82817-26-3P 82817-29-6P
82817-31-0P 82817-32-1P 82817-33-2P 82817-34-3P 82817-35-4P
82817-36-5P 82817-37-6P 82817-38-7P 82817-40-1P 82817-41-2P
82817-42-3P 82825-32-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 82817-28-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, lithiation, and condensation of with adamantane)
IT 1878-91-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, lithiation, and cyclocondensation with adamantanone)
IT 82817-39-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation, peroxymercuration, and bromination of)
IT **82817-23-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of, oxetane from)
RN 82817-23-0 HCAPLUS
CN Tricyclo[3.3.1.13,7]decane-2-acetic acid, 2-hydroxy-α,α-diphenoxy- (9CI) (CA INDEX NAME)



IT **82817-21-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and decarboxylation of)
RN 82817-21-8 HCAPLUS
CN Tricyclo[3.3.1.13,7]decane-2-acetic acid, α-(4-bromophenoxy)-2-hydroxy- (9CI) (CA INDEX NAME)

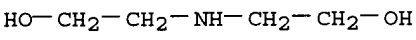


L67 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1953:29887 HCAPLUS
DN 47:29887
OREF 47:5061e-g
ED Entered STN: 22 Apr 2001
TI The influence of growth stimulators on the enzymes of the germinating seed. I. Histochemical control of dehydrases by telluric acid and 2,3,5-triphenyltetrazolium chloride
AU Dykyj-Sajfertova, Dagmar
CS Vyzk. ustav anorg. chemie, Usti n. Lab., Czech.
SO Sbornik Ceskoslov. Akad. Zemedelske (1952), 25, 317-32
DT Journal
LA Unavailable
CC 15A (Pesticides and Crop-Control Agents)
AB The germination and the reduction ability of wheat and other kinds of seeds, stimulated by high concns. (1-2 + 10-3 M) of 1-naphthaleneacetic acid and heteroauxin, were compared. To check reduction ability, H_2TeO_4 (I) and 2,3,5-triphenyltetrazolium chloride (II) were used. By high concns. of growth stimulators the embryo is not killed, only the growth is stopped and the enzyme activity is narcotized. The enzymic system has characteristics of dehydrases. The reduction potential of II is higher than that of I.
IT Weed control
(agents for)
IT Reduction
(by seeds, effect of growth regulators on)
IT Plant regulators
(effect on enzymes in seeds)

IT Wheat
(enzymes in, 2,4-D effect on)
IT Seeds
(enzymes in, effect of growth regulators on)
IT Wheat
(enzymes in, effect of growth substances on)
IT Enzymes
(growth-regulator effect on, in seeds)
IT Germination
(plant-regulator effect on)
IT **5742-19-8**, Ethanol, 2,2'-iminodi-, compound with (2,4-dichlorophenoxy)acetic acid
(effect on enzyme activity in wheat)
IT **298-96-4**, **Tetrazolium**, 2,3,5-triphenyl-2H-, chloride
11120-48-2, Telluric acid
(effect on enzymes in seeds)
IT 86-87-3, 1-Naphthaleneacetic acid
(effect on germination and reduction activity of seeds)
IT 87-51-4, 3-Indoleacetic acid
(effect on seed germination and reduction ability)
IT 9044-86-4, Dehydrase
(in seeds, effect of growth regulators on)
IT **5742-19-8**, Ethanol, 2,2'-iminodi-, compound with (2,4-dichlorophenoxy)acetic acid
(effect on enzyme activity in wheat)
RN 5742-19-8 HCAPLUS
CN Acetic acid, (2,4-dichlorophenoxy)-, compd. with 2,2'-iminobis[ethanol] (1:1) (9CI) (CA INDEX NAME)

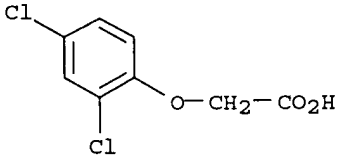
CM 1

CRN 111-42-2
CMF C4 H11 N O2

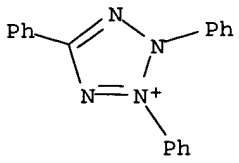


CM 2

CRN 94-75-7
CMF C8 H6 Cl2 O3



IT **298-96-4**, **Tetrazolium**, 2,3,5-triphenyl-2H-, chloride
(effect on enzymes in seeds)
RN 298-96-4 HCAPLUS
CN 2H-Tetrazolium, 2,3,5-triphenyl-, chloride (8CI, 9CI) (CA INDEX NAME)



● Cl⁻

=> b caba;d all l84 tot
FILE 'CABA' ENTERED AT 11:57:35 ON 25 OCT 2005
COPYRIGHT (C) 2005 CAB INTERNATIONAL (CABI)

FILE COVERS 1973 TO 7 Oct 2005 (20051007/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

The CABA file was reloaded 7 December 2003. Enter HELP RLOAD for details.

L84 ANSWER 1 OF 4 CABA COPYRIGHT 2005 CABI on STN
AN 2003:196312 CABA
DN 20033173664
TI Callus cultures of Genista plants - in vitro material producing high amounts of isoflavones of phytoestrogenic activity
AU uczkiewicz, M.; God, D.
CS Department of Pharmacognosy, Faculty of Pharmacy, Medical University of Gdan[acute]sk, al. Gen. J. Hallera 107, 80-416, Gdan[acute]sk-Wrzeszcz, Poland. mlucz@farmacja.amg.gda.pl
SO Plant Science, (2003) Vol. 165, No. 5, pp. 1101-1108. 32 ref.
Publisher: Elsevier Science Ltd. Oxford
ISSN: 0168-9452
CY United Kingdom
DT Journal
LA English
ED Entered STN: 20031209
Last Updated on STN: 20031209
AB Callus cultures of six Genista species were established with the objective to produce isoflavones of phytoestrogenic activity. The cultures were optimized for their growth and isoflavonoid production by changing various media in the presence or absence of light. The best growth and the highest isoflavone production was obtained under constant light regime on SH basal medium containing 22.6 [micro]mol l-1 2,4-dichlorophenoxyacetic acid (2,4-D), 23.2 [micro]mol l-1 kinetin and 3% w/v of sucrose. Callus cultures of all species produced more isoflavones than the parent herbs. The isoflavonoid group produced was composed of 14 compounds with a clear domination of genistein. In vitro cultures had lower contents of genistein esters than the herbs - possible causes are discussed. The callus with the highest isoflavone content was obtained from Genista tinctoria, producing 6586.5 mg of total isoflavones per 100 g DW, in which HPLC analysis identified 3016.3 mg of genistin.
CC FF003 Horticultural Crops (New March 2000); FF060 Plant Physiology and Biochemistry; FF170 in vitro Culture of Plant Material
SC 7Q; 7C; 7B; 0C; 7W; 0P; CA; HO; PL; AA
BT Genista; Papilionoideae; Fabaceae; Fabales; dicotyledons; angiosperms; Spermatophyta; plants
CT 2,4-D; callus; cell culture; in vitro culture; **isoflavones**;

plant growth regulators; plant oestrogens; tissue culture
RN 94-75-7; **5742-19-8**; 2008-39-1; **3599-58-4**; 2569-10-9; 94-11-1; 1929-73-3; 94-80-4; 25168-26-7
ORGN Genista tinctoria

L84 ANSWER 2 OF 4 CABA COPYRIGHT 2005 CABI on STN
AN 2003:80106 CABA
DN 20033054090
TI Cell cultures of Pueraria lobata (Willd.): growth and production of isoflavones and puerarin
AU Liu, H. L.; Li, L.
CS Department of Biology, South China Normal University, Guangzhou, 510631, China. liling@scnu.edu.cn
SO South African Journal of Botany, (2002) Vol. 68, No. 4, pp. 542-544. 17 ref.
ISSN: 0254-6299
DT Journal
LA English
ED Entered STN: 20030502
Last Updated on STN: 20030502
AB Callus and suspension cultures of P. lobata were established in Gamborg B5 medium supplemented with 1 mg 2,4-dichlorophenoxyacetic acid/litre, 1 mg NAA/litre, 0.5 mg kinetin/litre and 30 g sucrose/litre. The total isoflavone and puerarin contents in the natural roots, callus and suspension cultures were quantitatively compared by spectrophotometry and HPLC. Secondary product accumulation was low in the in vitro-grown material.
CC FF003 Horticultural Crops (New March 2000); FF060 Plant Physiology and Biochemistry; FF170 in vitro Culture of Plant Material
SC 7Q; 7W; 0C; 7B; 5C; CA; HE; HO
BT Pueraria; Papilionoideae; Fabaceae; Fabales; dicotyledons; angiosperms; Spermatophyta; plants
CT 2,4-D; callus; cell culture; cell suspensions; growth; in vitro culture; **isoflavones**; kinetin; medicinal plants; NAA; plant growth regulators; roots; secondary metabolites; sucrose; tissue culture; traditional medicines
RN 94-11-1; 1929-73-3; 94-80-4; 25168-26-7; 525-79-1; 86-87-3; 57-50-1; 94-75-7; **5742-19-8**; 2008-39-1; **3599-58-4**; 2569-10-9
ORGN Pueraria lobata

L84 ANSWER 3 OF 4 CABA COPYRIGHT 2005 CABI on STN
AN 93:134423 CABA
DN 19931643947
TI The effect of cultural conditions on the accumulation of formononetin by suspension cultures of Glycyrrhiza glabra
AU Arias-Castro, C.; Scragg, A. H.; Rodriguez-Mendiola, M. A.
CS Department of Molecular Biology and Biotechnology, University of Sheffield, Western Bank, Sheffield S10 2TN, UK.
SO Plant Cell, Tissue and Organ Culture, (1993) Vol. 34, No. 1, pp. 63-70. 37 ref.
ISSN: 0167-6857
DT Journal
LA English
ED Entered STN: 19941101
Last Updated on STN: 19941101
AB Secondary product accumulation by suspension cultures of G. glabra was studied. The cultures did not accumulate either glycyrrhizin of glycyrrhetic acid but did produce the isoflavonoid formononetin (FN). FN accumulation was maximum (2.5 mg/g dry weight (DW)) at pH 7, and generally decreased with increasing sucrose concentrations. 2,4-D induced the fastest growth, and was the only auxin studied and zeatin the only cytokinin studied to stimulate FN accumulation; maxima were 2.53 and 4.52 mg/g DW, respectively. FN accumulation was greatest in medium containing Gamborg's B5 organics and half-strength B5 inorganics, 0.5 mg 2,4-D and 0.05 mg kinetin/litre. Initially formononetin accumulation was non-growth related but became growth associated when the medium was modified.

CC WW000 Biotechnology (General) (Revised June 2002); FF040 Plant Composition; FF170 in vitro Culture of Plant Material; FF020 Plant Breeding and Genetics; FF060 Plant Physiology and Biochemistry; FF100 Plant Production
SC CA; HE; PL; 7B; 7W
BT Glycyrrhiza; Papilionoideae; Fabaceae; Fabales; dicotyledons; angiosperms; Spermatophyta; plants
CT Biotechnology; Plant growth regulators; Medicinal plants; Isoflavonoids; Liquorice; Glycyrrhizin; Cell culture; **formononetin**; 2,4-D; zeatin; kinetin; composition; growth rate; cytokinins
ST Glycyrrhetic acid
RN 1405-86-3; 485-72-3; 94-75-7; **5742-19-8**; 2008-39-1; **3599-58-4**; 2569-10-9; 94-11-1; 1929-73-3; 94-80-4; 25168-26-7; 1637-39-4; 525-79-1
ORGN Glycyrrhiza glabra; Glycyrrhiza

L84 ANSWER 4 OF 4 CABA COPYRIGHT 2005 CABI on STN
AN 78:66107 CABA
DN 19781346016
TI Effects of growth substances on non-induced and Botrytis cinerea culture filtrate-induced phaseollin production in Phaseolus vulgaris cell suspension cultures
AU Dixon, R. A.; Fuller, K. W.
CS Bot. Sch., Oxford Univ., UK.
SO Physiological Plant Pathology, (1978) Vol. 12, No. 3, pp. 279-288. 4 fig., 2 tab. 27 ref.
DT Journal
LA English
ED Entered STN: 19941101
Last Updated on STN: 19941101
AB Suspension cultures of P. vulgaris produced the phytoalexin phaseollin in the absence of added inducers. The concs. of plant growth substances in the culture medium affected growth of the cultures and the extent of phaseollin production, both in untreated cultures and in response to treatment with sterile culture filtrates from B. cinerea. 2,4-D was inhibitory to induced production at concs. of c. 2 X 10-6 M and above, whereas 1-naphthylacetic acid only inhibited significantly at 2 X 10-4 M. Gibberellic acid and abscisic acid both stimulated non-induced production, abscisic acid also inhibiting growth of the cultures. High kinetin concs. were inhibitory to non-induced production, but partially relieved inhibition of induction in culture filtrate-treated cells caused by growth in high concs. of 2,4-D. This increased response was associated with higher phenylalanine ammonia-lyase activity during the induction period than observed in cultures grown in low kinetin concs. However, as phenylalanine ammonia-lyase activity was often higher in control than in induced cultures, it is unlikely that this enzyme plays a regulatory role in phaseollin biosynthesis in this system.
CC FF600 Pests, Pathogens and Biogenic Diseases of Plants (Discontinued March 2000)
SC CA; CR; HO; PE; 0M; 0C
BT phenoxyacetic herbicides; phenoxy herbicides; herbicides; pesticides; auxins; plant growth regulators; gibberellins; growth inhibitors; cytokinins; Fabaceae; Fabales; dicotyledons; angiosperms; Spermatophyta; plants; Botrytis; Deuteromycotina; Eumycota; fungi
CT beans; effects; growth regulators; phytoalexins; **Phaseollin**; 2,4-D; NAA; gibberellic acid; Abscisic acid; Kinetin; diseases; production; tissue culture; grain legumes; vegetables; vegetable legumes; plant pathology; plant growth regulators
ST phaseollin production; phaseollin production in bean; phytoalexins production
RN 13401-40-6; 94-75-7; **5742-19-8**; 2008-39-1; **3599-58-4**; 2569-10-9; 94-11-1; 1929-73-3; 94-80-4; 25168-26-7; 86-87-3; 77-06-5; 21293-29-8; 525-79-1
ORGN Botrytis cinerea; Phaseolus; Fabaceae

```
=> b home
FILE 'HOME' ENTERED AT 11:57:43 ON 25 OCT 2005

=>
```